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United States
Department of
Agriculture
**Forest
Service**
Southwestern
Region

# Forest Pest Management Report

R-3 90-7

BIOLOGICAL EVALUATION OF PEST CONDITIONS AND
POTENTIAL HAZARD TREES IN SELECTED RECREATION SITES
ON THE CAMINO REAL AND QUESTA RANGER DISTRICTS,
CARSON NATIONAL FOREST, NEW MEXICO

APRIL 1990

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# BIOLOGICAL EVALUATION OF PEST CONDITIONS AND POTENTIAL HAZARD TREES IN SELECTED RECREATION SITES ON THE CAMINO REAL AND QUESTA RANGER DISTRICTS, CARSON NATIONAL FOREST, NEW MEXICO

APRIL 1990

By

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## ABSTRACT

In 1989, Forest Pest Management, R-3 initiated an Insect and Disease Incidence Survey Program of recreation sites. The purpose of this program is to evaluate the overall "health" of proposed and existing recreation areas on the National Forests in the Southwest. This report summarizes the hazardous tree and pest conditions found at nine developed recreation sites surveyed on the Carson National Forest. One picnic area (PA) and 4 campgrounds (CG) were surveyed on the Camino Real Ranger District (RD) and 4 campgrounds were surveyed on the Questa RD. Specific areas surveyed (Figures 1 and 2) included:

| Camino Real RD | Questa RD |
|---|---|
| La Vinateria PA | Columbine CG |
| Las Petacas CG | Fawn Lakes CG |
| El Nogal CG | Elephant Rock CG |
| Capulin CG | June Bug CG |
| La Sombra CG | |

Because many of these campgrounds are scheduled for rehabilitation sometime in the 1990s, management alternatives for hazard tree management and vegetation management plans are also presented for consideration.


## OBJECTIVES

The objectives of this survey were to: (1) Identify hazardous trees occurring within these developed recreation sites, and (2) evaluate the incidence of insect and disease activity and damages in recreation sites scheduled for reconstruction.

## SURVEY DESIGN

The procedures followed are described in the "Inventory of Insects, Disease, and Hazard Tree Incidence Work Plan for Developed Recreation Sites on National Forest System Lands in the Southwest" (Rogers, 1989). This survey consists of two parts; a hazard tree survey and an insect and disease pest incidence survey. A hazard tree is defined as any tree with both a mechanical defect that could cause a tree to fail and a potential target (ex., table, campsite, parking pad, toilet facility, etc.). Only trees located in areas of intensive public use and showing signs of structural defect (dead top and or branches, bole rot, and exposed roots, etc.) were evaluated. Tree species, diameter inside bark (DIB), location, defect, and hazard tree rating were recorded on the Hazard Tree Evaluation Forms (Appendix) and plotted on the site design maps provided by the Forest (Appendix).

The hazard tree rating system is patterned on the procedures described by Johnson (1981) and involves the factors that contribute to tree failure such as dead limbs and weak forks, degree of lean, and signs of insect and disease-caused damages. This system involves a two-part Failure/Risk rating, each part using a descriptive rating scale of High (H), Medium (M), and Low (L) to estimate probability. The first part of this rating system is an estimate of the probability that the tree or major portions thereof will fail within the

next five years; the second part is an estimate of the probability that the failed tree or portions thereof will cause injury to people or damage to property if failure does occur. Only trees located in areas more likely to be occupied by people or property were evaluated and recorded on the evaluation forms.

The insect and disease pest incidence survey was a 100 percent tree survey conducted concurrently with the hazard tree evaluation survey. The following data were collected for each tree exhibiting signs of insect, disease, and abiotic damages: Species, diameter at breast height (DBH), tree history, damage code, and a dwarf mistletoe rating (DMR) (Hawksworth, 1977). These data were recorded on Region 3's Forest Stand Tree Record Sheets.

## RESULTS

Vegetation in the nine developed recreation sites surveyed varied from mixed conifer such as ponderosa pine, southwestern white pine, Douglas-fir, true firs, and spruce to cottonwoods, junipers, and willows. With the exception of Fawn Lakes CG, all sites surveyed were located near or adjacent to riparian areas. Generally, conifers are considered to be more tolerant of the types of stress found in developed recreation sites than hardwoods such as aspens and cottonwoods. As a result, the higher the proportion of conifers in the existing vegetation, the healthier the campground is in terms of hazard trees.

A total of 154 trees were rated for hazard in the nine recreation sites surveyed. One hundred thirty-five trees were identified as potentially hazardous to property and public safety. Approximately half of these trees (73 trees) were rated in the high-medium risk category, which means they have a high probability of failing within the next five years. The numbers of trees per site in each rating class or category are summarized in Table 1. Although both hardwoods and conifers were defective, the majority of the trees rated for hazard (93 trees) in the sites surveyed were large, old hardwoods (cottonwoods) located in riparian areas along the Rio Fernando de Taos in Taos Canyon (Camino Real RD) and the Red River in Red River Canyon (Questa RD). All of the trees examined had dead tops, dead branches, or they were completely dead. Dead tops and branches in cottonwoods are more dangerous than in conifers due to the nature of their massive limbs and large, wide spreading crowns. Columbine, Fawn Lakes, Elephant Rock, and June Bug CGs (Questa RD) had the highest number of hazardous trees per site; and La Vinataria PA, Las Petacas, El Nogal, Capulin, and La Sombra CGs (Camino Real RD) the lowest number of hazardous trees per site. Specific information on the recorded hazard trees and their locations are provided on the Tree Hazard Evaluation form for each site surveyed (Appendix) and Figures 1 through 9 (Appendix). Highest priority should be given to category 1 (H/H) and category 2 (M/H) trees. These trees have the highest probability of failure and present the greatest risk to property and visitor safety.

Table 1. Summary of the number of hazard trees in each rating class by recreation site surveyed on the Camino Real and Questa Ranger Districts, Carson National Forest.

| Recreation Site | Number of Trees with Rating of: H/H[a] | H/M | H/L | M/H | M/M | TOTAL |
|---|---|---|---|---|---|---|
| Camino Real RD | | | | | | |
| La Vinataria PA | 2 | 2 | - | 2 | 1 | 7 |
| La Petacas CG | 1 | - | - | - | - | 1 |
| El Nogal CG | 4 | - | 1 | | 2 | 7 |
| Capulin CG | 3 | 1 | 2 | 1 | 1 | 8 |
| La Sombra CG | 5 | 2 | 2 | - | - | 9 |
| Subtotal | 15 | 5 | 5 | 3 | 4 | 32 |
| Questa RD | | | | | | |
| Columbine CG | 21 | 12 | 1 | - | 1 | 34 |
| Fawn Lakes CG | 8 | 4 | 1 | 1 | 2 | 16 |
| Elephant Rock CG | 11 | 3 | 2 | 3 | 1 | 20 |
| June Bug CG | 7 | 11 | 3 | 5 | 8 | 34 |
| Subtotal | 46 | 30 | 7 | 9 | 12 | 104 |
| Total | 61 | 34 | 12 | 12 | 16 | 135 |

PA = Picnic Area, CG = Campground

[a] Failure/Risk Rating: H = High, M = Medium, L = Low

The hazard ratings provided are not recommendations for action. They are a professional estimate of the probability of tree failure within the next five years and should be used by the land manager during the decision-making process when developing management plans for recreation areas.

The most noticeable tree damages observed during this survey were caused by the western spruce budworm, Choristoneura occidentalis. This insect, which was at outbreak levels from 1976 to 1985, caused extensive defoliation damages to the mixed confer stands comprising the Capulin, La Sombra, Columbine, Fawn Lakes, Elephant Rock, and June Bug CGs. Although these campgrounds were treated with a combination of ground spray treatments with the bacterium Bacillus thuringiensis (B.t.) and acephate tree implants in 1986 (Rogers, 1986,) and B.t. again in 1987, many of the trees, particularly those along the perimeter of the campgrounds, still appear heavily defoliated due to the severe needle loss that occurred. Although no mortality was directly attributed to the WSB in the campgrounds surveyed, this defoliator, in combination with recreation site stresses from compaction due to heavy visitor use and poor site conditions, predisposed many of the mixed conifers to Douglas-fir beetle (DFB), Dendroctonus pseudotsugae, and spruce beetle, Dendroctonus rufipennis, attacks.

The most damaging of these bark beetles has been the Douglas-fir beetle. Both individual and small group tree mortality (ranging from two to eight trees) resulting from these bark beetles was found at the La Sombra, Columbine, Fawn Lakes, Elephant Rock, and June Bug sites (Figures 4 and 6-12). Seventeen of the 34 Douglas-fir beetle-killed trees were rated as high risk hazard trees because of their close proximity to permanent structures and places of public access (see Figures 7, and 10-13, Appendix). Although the Douglas-fir beetle has caused relatively low levels of tree mortality in the campgrounds evaluated during this survey, this bark beetle has caused extensive tree mortality along the adjacent backdrop and side drainages of Red River Canyon. The large majority of the mortality observed in this canyon occurred on low quality sites with slopes in excess of 40 percent.

Douglas-fir dwarf mistletoe (DFDM), Arceuthobium douglasii, caused the most significant disease damages encountered during this survey. Moderate to heavy DFDM tree infections were found at Columbine and Fawn Lakes CGs (Figures 11 and 12, Appendix). Trees of all age and size classes were infected. Individual tree DFDM-ratings (Hawksworth 6-Class Rating System, 1977) ranged from 2-6 at Columbine CG and 3-6 at Fawn Lakes CG and averaged 4.3 and 4.9 overall, respectively. Many of the trees with ratings of 5 and 6 were dead or had severe top-killing. Although DFDM was not detected in the campgrounds located along Taos Canyon, several pockets of moderate to heavy DFDM-infected trees (DFDM-ratings of 4-6) were observed in the mixed conifer stands along the southern boundary and backdrop of Capulin CG. There are six possible ratings for DFDM infected trees (1-6) and one for noninfected trees (0). Infection classes 1, 2, and 3 usually result in little or no impact on growth of pole- and sawtimber-sized trees. Those in classes 4, 5, and 6 are declining in growth and vigor, and are poor risk trees. Seedlings and saplings may be seriously affected even when in classes 1, 2, and 3.

If left untreated, DFDM infections typically increase one rating in a ten year period, depending on initial intensification (DFDM-rating) (Lightle and Hawksworth, 1983). Mortality rates are much higher for trees in infection classes 4, 5, and 6 than for classes 1, 2, and 3, or noninfected trees (Beatty, 1982).

Other than the hazardous trees previously mentioned, no significant insect or disease related activity was detected at La Vinataria PA or the Las Petacas, and El Nogal CGs.

## BIOLOGY OF PESTS

### Western Spruce Budworm, Choristonerua occidentalis

The western spruce budworm (WSB) is a native insect occurring throughout the Douglas-fir and true fir and mixed conifer forest cover types in the Western United States. When at outbreak levels, the WSB is capable of causing considerable damages to commercially forested areas, developed recreation sites, and areas valued for their esthetic and scenic beauty.

Despite its name, the WSB feeds on and damages a variety of coniferous trees. Douglas-fir, true firs, and spruce are the primary host species in New Mexico.

Budworm larvae, particularly in the mature stages, feed almost exclusively on the new foliage of host trees. During periods of epidemic population levels, these feeding larvae may consume nearly all the new needle growth, causing the tree crowns to appear scorched as if burned by fire. Several years of intensive feeding may result in trees being completely defoliated and appearing dead. Severe defoliation impacts the visual quality of the areas and causes growth loss, top-killing, tree mortality, and predisposes the highly stressed trees to bark beetle attack.

The budworm has one generation a year. Moth flight and mating generally occurs in late July through early August. Females then proceed to lay eggs on the undersides of needles from late July through mid-August. Eggs hatch in about ten days. The hatching caterpillars do not feed, but seek hiding places on limbs or the bole of the host trees. They spin silken shelters (hibernacula) in which they hibernate during the winter. In the spring, the larvae begin mining the reproductive and vegetative buds and older needles. Later, they begin feeding on the new foliage. Larvae mature in 30 to 40 days after attacking the buds. The mature larvae pupate in silken webs at the last feeding site or elsewhere on the foliage. The pupal stage lasts about ten days after which the adult moth emerges.

Budworm populations are usually regulated by combinations of several natural factors such as insect parasites, vertebrate and invertebrate predators, and adverse weather conditions. However, the combined effect of natural agents does not prevent or reduce population resurgences when climatic and forest conditions are favorable to an increase in budworm populations. During prolonged outbreaks when stands become heavily defoliated, starvation can be an important mortality factor in regulating WSB populations.

When necessary, WSB populations can be substantially reduced with insecticides. Large forested areas can be aerially sprayed for short-term protection and individual high value trees can be sprayed using ground equipment.

Douglas-fir beetle, Dendroctonus pseudotsugae

The Douglas-fir beetle infests Douglas-fir throughout most of the Western United States, British Columbia, and Mexico. Douglas-fir beetles normally kill small groups of trees, but losses can be devastating during periods of periodic outbreaks such as that which has been occurring in northern New Mexico on the Questa RD, Carson National Forest.

Douglas-fir beetle infestations usually occur in windthrown trees or trees damaged by windfalls, fire-scorch, or defoliation. Where susceptible trees are abundant, the beetle population can build up rapidly. Damage is usually greatest in dense stands of mature Douglas-fir. Various fungi introduced by these beetles also contribute to the mortality of the infested trees.

Evidence of infestation consists of reddish-orange frass expelled from bark crevices by the invading beetles. Sometimes the most evident sign of infestation is clear resin exuding from the entrance holes on the stem at the upper limit of the infestation.

Several months after the tree is infested, its foliage becomes discolored. First the needles turn yellow, then sorrel, and finally, reddish-brown.

Although some trees begin fading as early as August, others remain green until the following June.

The Douglas-fir beetle has one generation per year. Broods remain in the tree and overwinter mainly as adult beetles, but also as larvae. Depending on variations in locality and seasonal weather, adults that have overwintered generally emerge and fly to new host trees from April to early June. Larvae that have overwintered complete their development and emerge in the summer. Some adults that flew in the spring reemerge and make a second attack usually in late June or July.

The resistance of live trees to bark beetle attack is the most important natural control factor. Climate and weather also strongly influence Douglas-fir beetle populations. Natural enemies include many parasitic or predaceous insects, nematodes, and mites.

Management of the Douglas-fir forests offers the best method of preventing or minimizing damage by the Douglas-fir beetle. Stands containing mature and overmature Douglas-fir should be harvested. Younger stands should be periodically thinned to maintain vigorous growth and reduce moisture stress. Such practices should be accompanied by salvage of windthrown or bark beetle infested trees before beetle broods emerge from them.

Douglas-fir dwarf mistletoe, Arceuthobium douglasii

Douglas-fir dwarf mistletoe (DFDM) is the most damaging disease of Douglas-fir, Pseudotsuga menziesii. Dwarf mistletoes are parasitic, seed-bearing plants that depend on their hosts almost completely for their water and nutrients. The disease spreads by explosively released seeds which are expelled to distances ranging from 10 to 40 feet. Seeds of DFDM are released in late July and early August. Infection follows a few months after dispersal, most taking place through the bark on needle-bearing portions of twigs. Dwarf mistletoes first produce an endophytic system, a specialized root-like structure that is in contact with the phloem and xylem of host trees, from which the parasite obtains most of its nutrients and water. The aerial shoots appear between two to five years after infection; this period of infection before shoots are visible is known as the latent period.

The disease causes a decrease in the quality, quantity, germination percent of seeds produced, lowers timber quality, reduces growth, and eventually leads to mortality in heavily infected trees. Severely infected trees are more susceptible to attacks by insects and other diseases and to environmental stresses such as drought. Heavily infected trees (DMR = 5 or 6) may sustain a 20 to 50 percent reduction in growth when compared to uninfected trees and their life expectancy is severely decreased (Lightle and Hawksworth, 1973). Dwarf mistletoe infects trees of all ages and thus is a problem in second growth and regeneration, as well as mature and overmature stands.

Spread of DFDM is a function of stand density, age, and site index, and averages one to two feet a year. Spread is most efficient and rapid from an infected overstory to an understory and slowest through an evenaged stand. Management of DFDM is directed toward decreasing spread and intensification of disease since DM eradication is achieved only by removing the entire stand of

trees.

The following suggestions for DFDM control in recreational forests are offered based on a 20 year study in Grand Canyon NP by Lightle and Hawksworth (1973):

-Pruning is recommended in lightly infected trees (DMR <3). Remove branches two whorls above highest DM-infected branch to insure against latent infections. No more than 50% of the live crown should be removed.

-Confine pruning to more isolated trees. Repruning has been required in densely stocked stands due to numerous latent infections in areas initially considered lightly infected.

-Infected branches should be cut off at the bole in order to insure removal of the endophytic, root-like, system in the host tissue.

-Trees with bole infections do not need to be killed since bole infections are not vigorous.

-Pruning witches brooms on heavily infected trees (DMR = 3 - 4) does prolong life. A shorter life expectancy corresponds to higher DMR.

Other management strategies include:

-Sanitize densely stocked stands. The most severely infected trees are removed to eliminate much of the inoculum and promote vigor of lightly and noninfected trees.

-Remove severely infected overstory trees. A vegetation management plan is desirable, with emphasis on nonhost species eventually replacing DM-infected trees.

-Apply ethylene-releasing chemicals to promote abscission of DM aerial shoots (Beatty, et.al., 1988; Nicholls, et.al., 1987). This method greatly reduces seed dispersal; the pathogen is not eliminated since the endophytic system remains viable within the host tissue and new aerial shoots form in two to five years. Chemicals need to be reapplied every few years, making this method suitable to high value areas where susceptible trees have been established under an infected overstory.

## MANAGEMENT ALTERNATIVES

1. Do nothing. Trees rated as potential hazards will continue to decline and the probability of failure will increase. Trees will continue to be damaged by campers and by natural causes, so the number of potential hazards will also increase. The possibility of tree failure with property damage and injury to people will increase. Dwarf mistletoe-infected trees will continue to decline in health and vigor and serve as inoculum for spread and intensification of disease. Risk of mortality will exist on densely stocked sites, especially those severely infected with DM, due to susceptibility to attack by bark beetles.

2. Remove or lessen the probability of failure of hazard trees. The land

manager must decide the acceptable risk level in an area and hazard trees would be removed or treated until that risk level is reached. In many cases, pruning dead branches or DM brooms would substantially reduce the probability of failure. When pruning hazardous branches on hardwoods, drop-crotching (Figure 14, Appendix) is preferred over topping (Figure 15). Remaining leaders on drop-crotched trees will produce foliage to inhibit latent shoots, encourage callus growth over wounds, and add to the longevity and attractiveness of the tree. Unlike drop-crotching, topping results in rapid sucker growth. Such shoots are weak and destroy the natural tree shape. Dead tops on conifers should also be removed as soon as practical (Mills and Russell, 1981). For trees showing signs of internal decay, the thickness of sound wood in the outer shell determines relative safety. Trees that lean naturally usually are reinforced by compensatory growth. However, structural damage to leaning trees, such as severed roots, large basal cavities, and internal decay increase the probability of failure and threaten visitor safety (Johnson, 1981).

3. Remove the targets. Under this alternative, campgrounds or selected areas within campgrounds that are identified as targets are closed to public use. Removal of potential targets will remove the problem of hazard trees.

4. Develop a vegetation management plan which reduces incidence of insect and disease and development of hazard trees. This may include activities such as: Thinning a dense stand of trees which reduces stress and probability of bark beetle attack; sanitizing to decrease the incidence of DM infection; pruning DM-infected trees to prolong life; and planting nonhost species under an infected Douglas-fir overstory.

5. A combination of alternatives 2 and 3 and 4. These alternatives are not mutually exclusive and can be used in combination to solve specific problems in many areas.

ACKNOWLEDGMENTS

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# APPENDIX

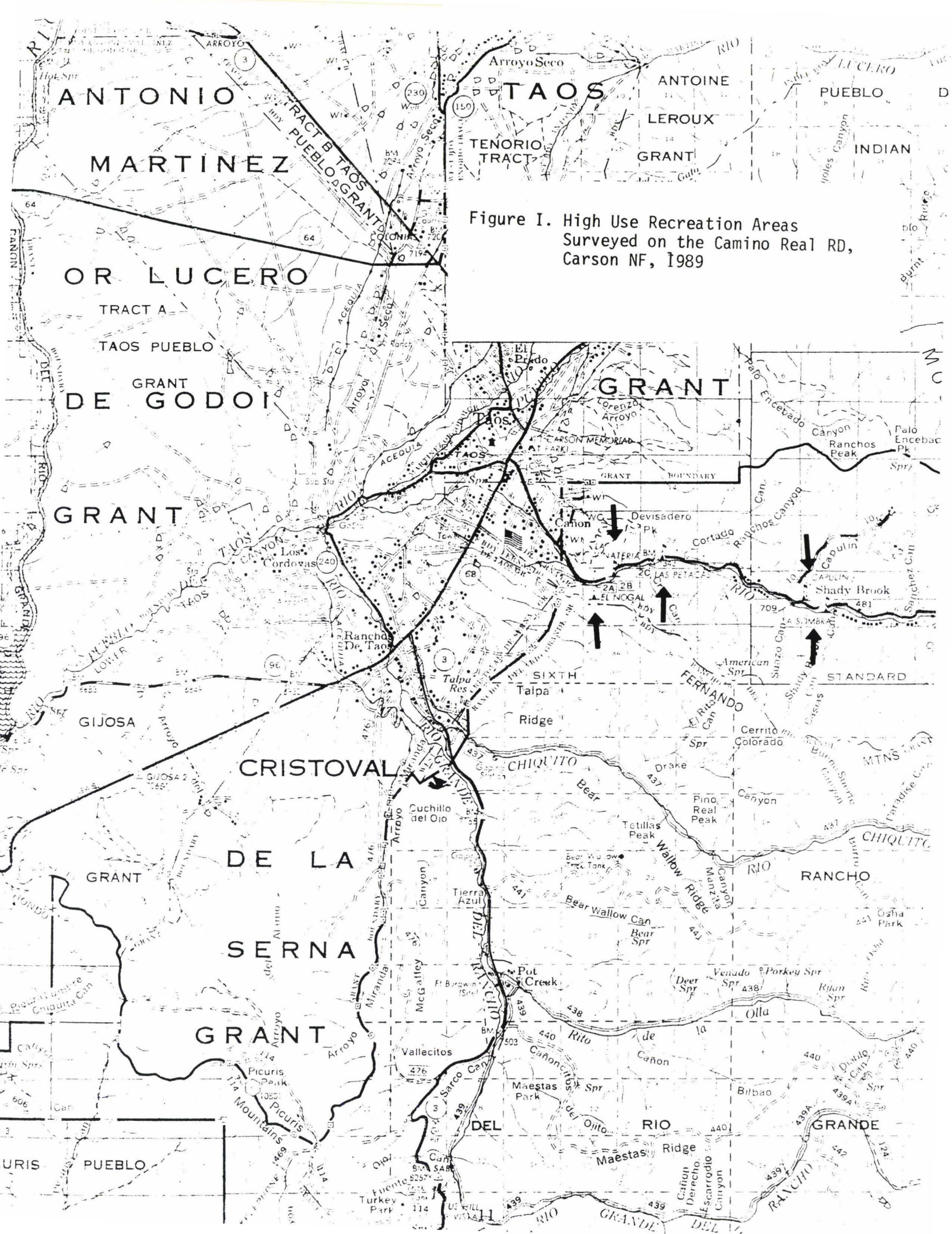



Figure I. High Use Recreation Areas Surveyed on the Camino Real RD, Carson NF, 1989

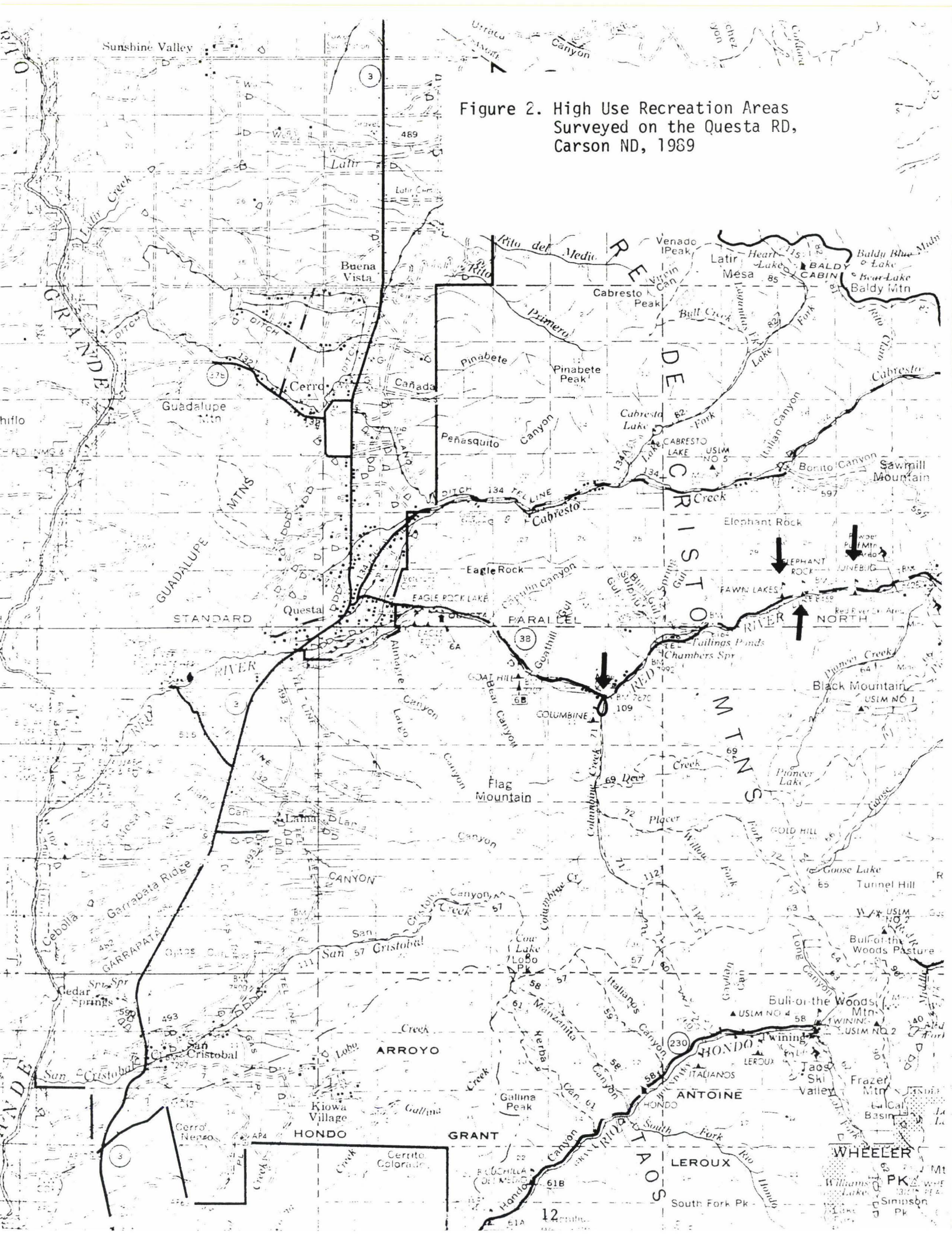



Figure 2. High Use Recreation Areas Surveyed on the Questa RD, Carson ND, 1989

**Figure 3. El Nogal CG**
**Hazard Tree Survey Map**
**Camino Real RD, Carson NF**

NEW MEXICO
Sec 27, Twp 25N, Rge 13 E.
Planned & Mapped By R.L. Boeckman 8-1-57
Contour interval Five Feet
Scale 1" = 40'
August 1957
Revised Sept 1957

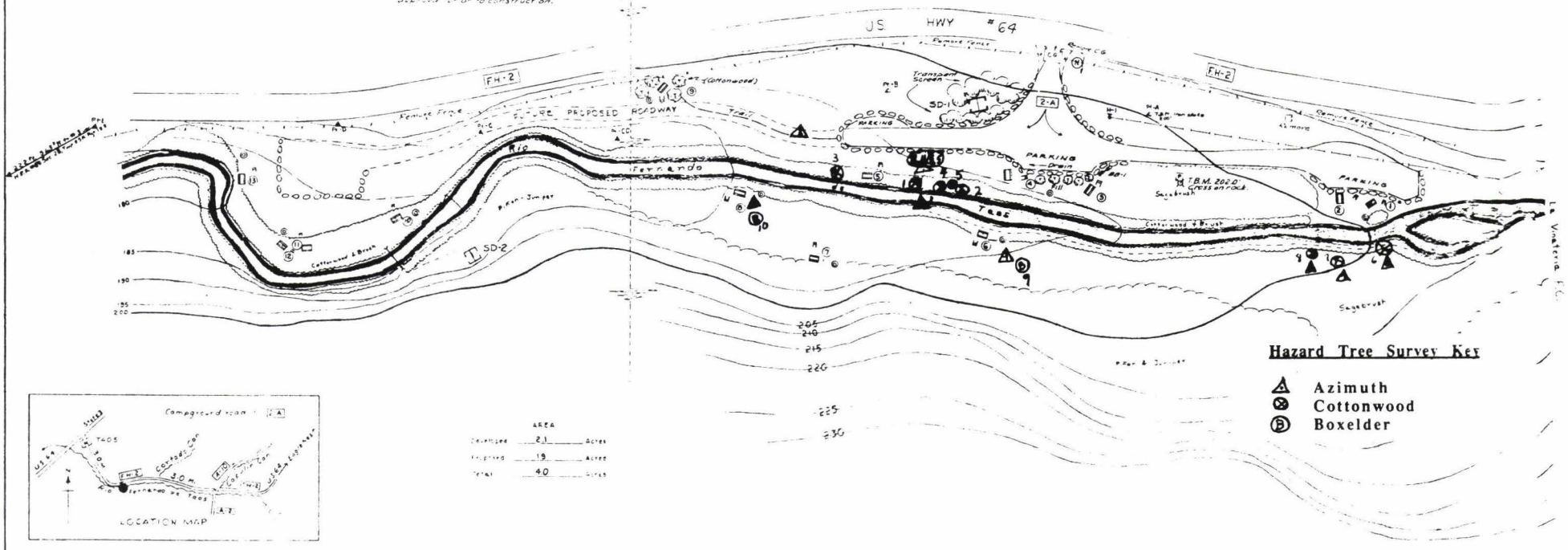
APPROVED BY L.F. Hamilton, Forest Supervisor, 9/30/57 DATE
APPROVED BY Jack Adcock, Regional Forester, 10/15/57 DATE

| ITEM | TYPE |
|---|---|
| TABLE | CONCRETE |
| FIREPLACE | MASONRY |
| GARBAGE CAN | 30 GAL. GALV. |
| GARBAGE PIT | METAL COVER |
| LATRINE (SD) | SINGLE DUAL |
| LATRINE | SINGLE UNIT |
| BRIDGE FOOT | LOG-TIES IN A |
| BARRIER, TRAFFIC | ROCK |
| RAIL | |
| POLE & BOARD | SINGLE FACE RUSTIC |
| ENTRANCE SIGN | DOUBLE FACE RUSTIC |
| CATTLE GUARD | |
| FENCE | |
| WATER SYSTEM | PRESSURE TYPE |
| HYDRANT | DOUBLE POST |
| ROADWAY | |

LEGEND
To Be Removed
To Be Reforested

| QUANTITIES EXIST | QUANTITIES PROP | UNIT | PLATE EXIST |
|---|---|---|---|
| | 15 | EA | 32A |
| | 18 | EA | 6A |
| | 10 | EA | 36 |
| | 2 | EA | 33A |
| | 2 | EA | 19 |
| | 360 | M | 35 |
| 460 | 460 | M | |
| | 1 | EA | 12 |
| | 1 | EA | |
| | 340 | M | |
| | 1 | EA | 25 |
| | 480 | M | |

POSSIBLE EXPANSION — Construction period and time sequence decided prior to construction. — DEVELOPE FIRST STAGE



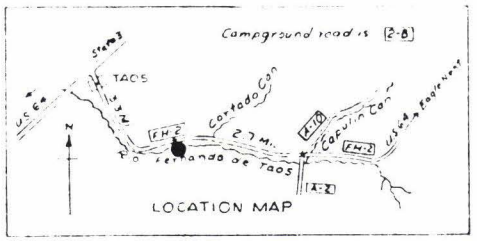

AREA
Developed 2.1 Acres
Reforest 1.9 Acres
Total 4.0 Acres




**Hazard Tree Survey Key**

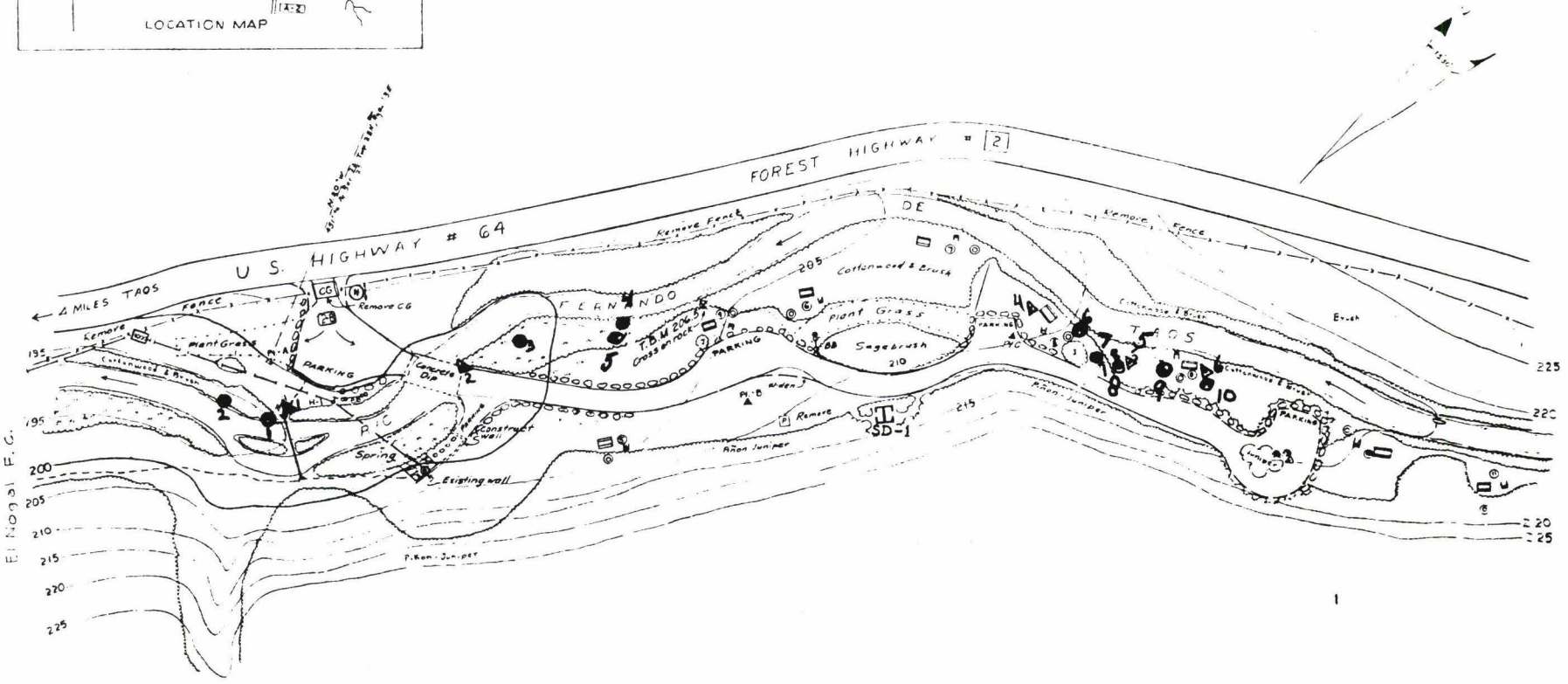
- Azimuth
- Cottonwood
- Boxelder

DRW 8-13-57 HOD 9-23-57




AREA

| | | |
|---|---|---|
| Developed | 2.4 | Acres |
| Undeveloped | REHABILITATED | Acres |
| Future | UNKNOWN | Acres |




| LEGEND | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| ITEM | | TYPE | NUMBERED UNITS PROP. | NUMBERED UNITS EXISTING | QUANTITIES PROP. | QUANTITIES EXIST. | QUANTITIES TOTAL | PLATE PROP. | PLATE EXIST. |
| | TABLE | CONCRETE | 4 Inv. 11 | | 8 | | 8 | 32A | |
| | FIREPLACE | COOKING | 4 Horiz. 11 | | 8 | | 8 | 16A | |
| | BRIDGE FOOT | To Be Reconstructed | | | | 1 | 1 | | 19 |
| | APRON (DAM) | CONCRETE | | | 1 | | 1 | | |
| | LATRINE | SINGLE DUAL PIT | SD-1 | | 1 | | 1 | 39A | |
| | GARBAGE CAN | 30 GAL. GALV. | | | 8 | | 8 | 36 | |
| | BARRIER | ROCK | | | 610 M. | | 610 M. | 39 | |
| | FENCE | To Be Removed | | | | | | | |
| | CATTLE GUARD | To Be Removed | | | | | | | |
| | WATER LINE | | | | 250 M. | | 250 M. | | |
| | HYDRANT | | 1 | | | 1 | 1 | 25 | |
| 1000 | STORAGE TANK | 1000 GALLON | | | 1 | | 1 | | |
| | MARSHY AREA | | | | | | | | |
| | ENTRANCE SIGN | DOUBLE FACE, RUSTIC | | | 1 | | 1 | | |
| | BULLETIN BOARD | SINGLE FACE, RUSTIC | | | 2 | | 2 | 12 | |
| | TRAIL | | | | | | | | |
| | JUNIPER TREE | | | | | | | | |
| | GARBAGE PIT | To Be Removed | | | | 1 | | | 23 |

* Proposed changes in road system shown by dash lines also

UNIT-242

## Hazard Tree Survey Key

Azimuth

Cottonwood

Contour interval Five Feet

Scale 1" = 40'

August 1957

Revised Sept 1957

APPROVED BY _____ DATE 9-30-57

APPROVED BY _____ DATE 10/11/57

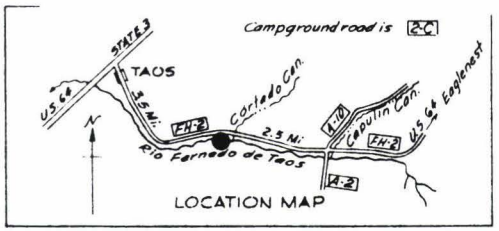


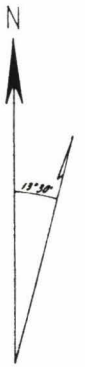
**Figure 4. La Vinataria PA**
**Hazard Tree Survey Map**
**Camino Real RD, Carson NF**

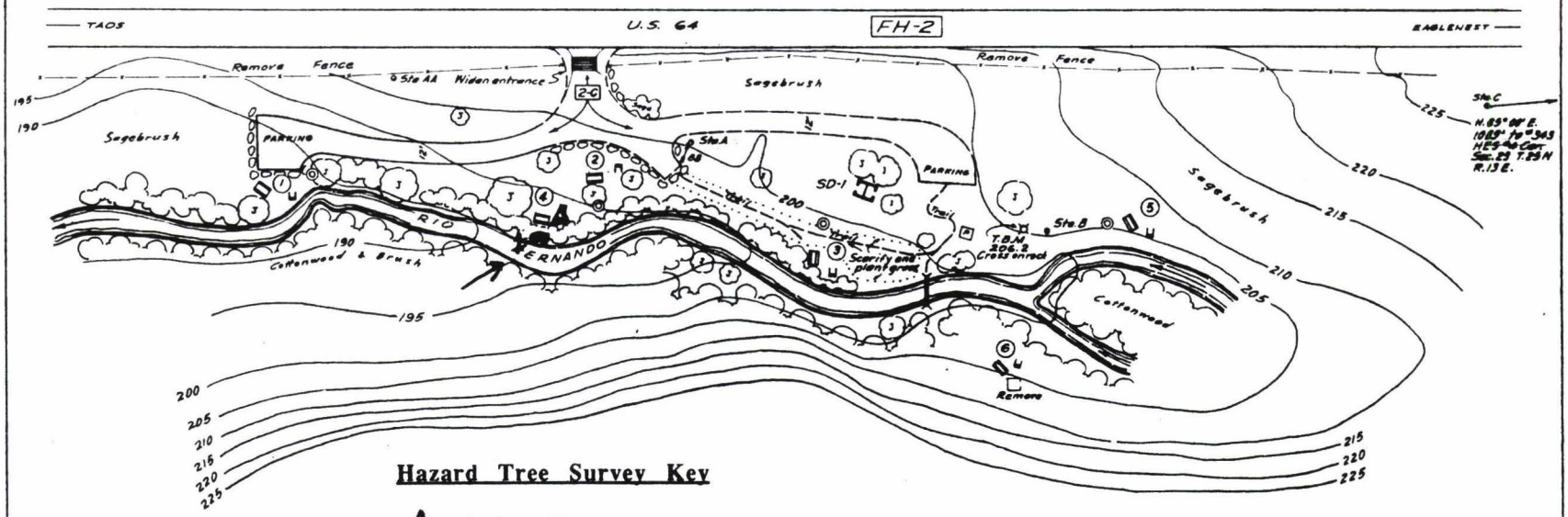
# Figure 5. Las Petacas CG
# Hazard Tree Survey Map
# Camino Real RD, Carson NF

LEGEND

| | ITEM | TYPE | NUMBERED UNITS PROP | NUMBERED UNITS EXISTING | QUANTITIES PROP | QUANTITIES EXIST | QUANTITIES TOTAL | PLATE PROP | PLATE EXIST |
|---|---|---|---|---|---|---|---|---|---|
| | TABLE | CONCRETE | 1 thru 5 | | 5 | | 5 | 32A | |
| | FIREPLACE | IRON GRILL | 1 thru 5 | | 5 | | 5 | 16A | |
| | GARBAGE CAN | | | | 4 | | 4 | | |
| | CATTLE GUARD TO BE REMOVED | | | | | 1 | | | |
| | FENCE TO BE REMOVED | | | | | 130 M | | | |
| | BRIDGE | RUSTIC, FOOT - To be removed | | | | 2 | | | |
| | TOILET T-1 | SINGLE UNIT To be removed | | | | 1 | | | |
| | TOILET SD-1 | SINGLE DUAL | | | 1 | | 1 | 39A | |
| | TRAFFIC BARRIER | ROCK | | | 205 M | | 205 M | | |
| | BULLETIN BD. | SINGLE FACE | | | 1 | | 1 | 12 | |
| | SIGN (Name) | RUSTIC ON CROSS ARM | | | 1 | | 1 | | |
| | Juniper | | | | | | | | |
| | Cottonwood and Bushes along river | | | | | | | | |




## Hazard Tree Survey Key

△ Azimuth

⊗ Cottonwood

Sec. 23, Twp. 25 N. Rge. 13E.
Mapped & Planned By R.L. Blanchard 4-18-57
Contour Interval 5 Feet
Scale 1"=40'
August 1957
Revised Sept. 1957

AREA
Developed ____ Acres
Proposed 1.75 Acres
Future ____ Acres

APPROVED BY: [signature] FOREST SUPERVISOR Acting 9/13/57 DATE

APPROVED BY: [signature] ASSISTANT REGIONAL FORESTER 9/23/57 DATE

H.O.D. 9-23-57

M-210-1RL

**Figure 6. Capulin CG**
**Hazard Tree Survey Map**
**Camino Real RD, Carson NF**

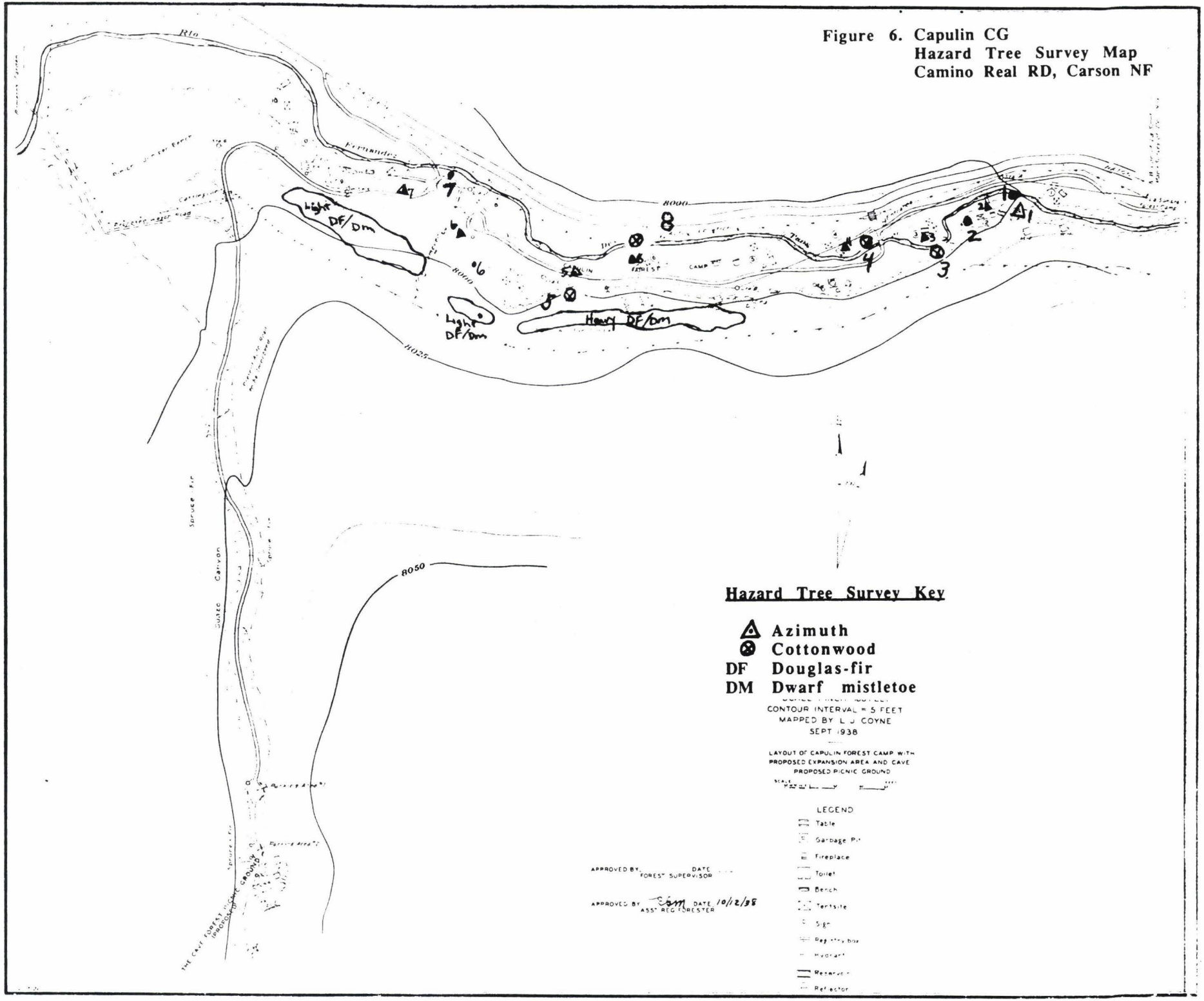


Figure 7. La Sombra CG
Hazard Tree Survey Map
Camino Real RD, Carson NF

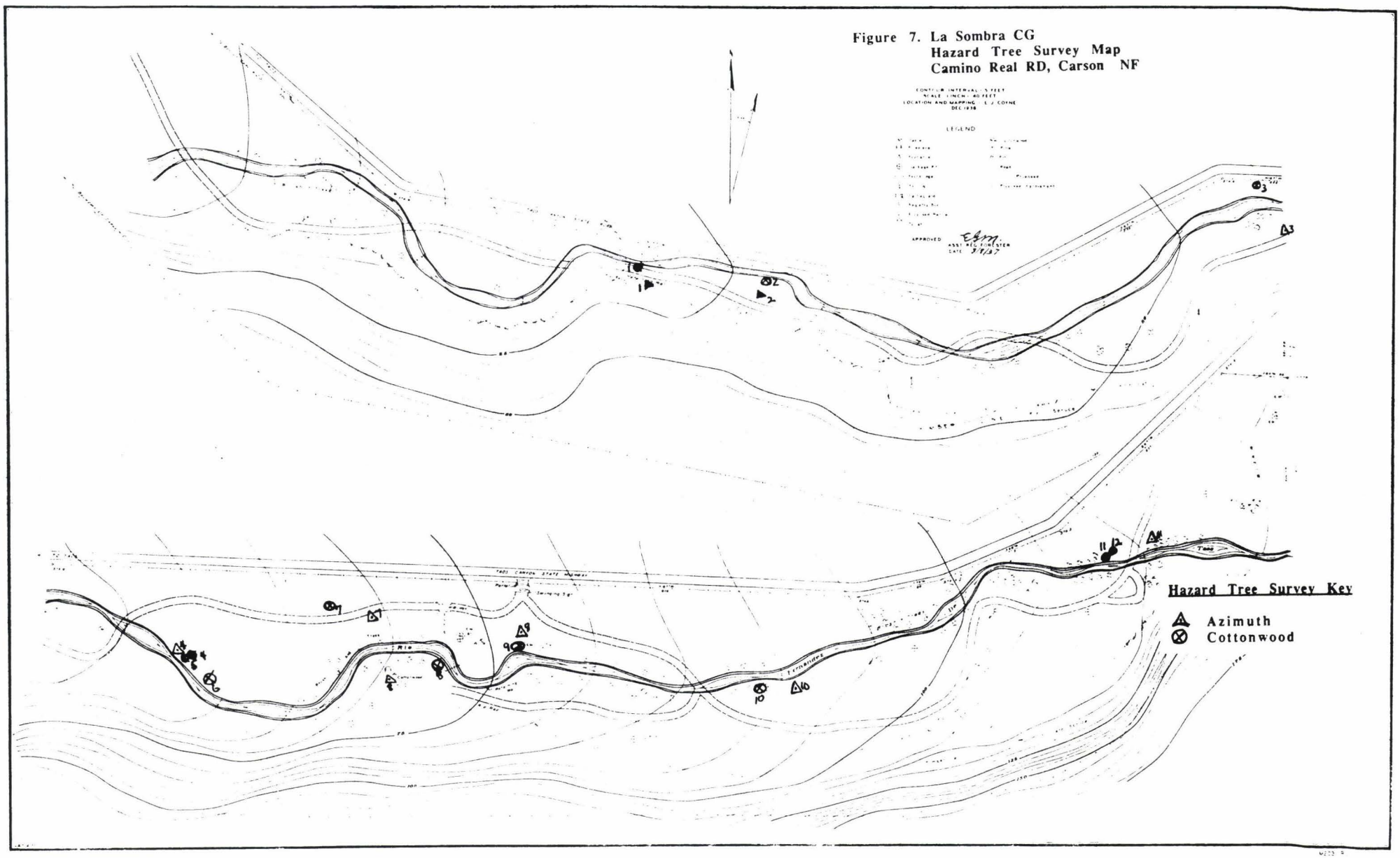
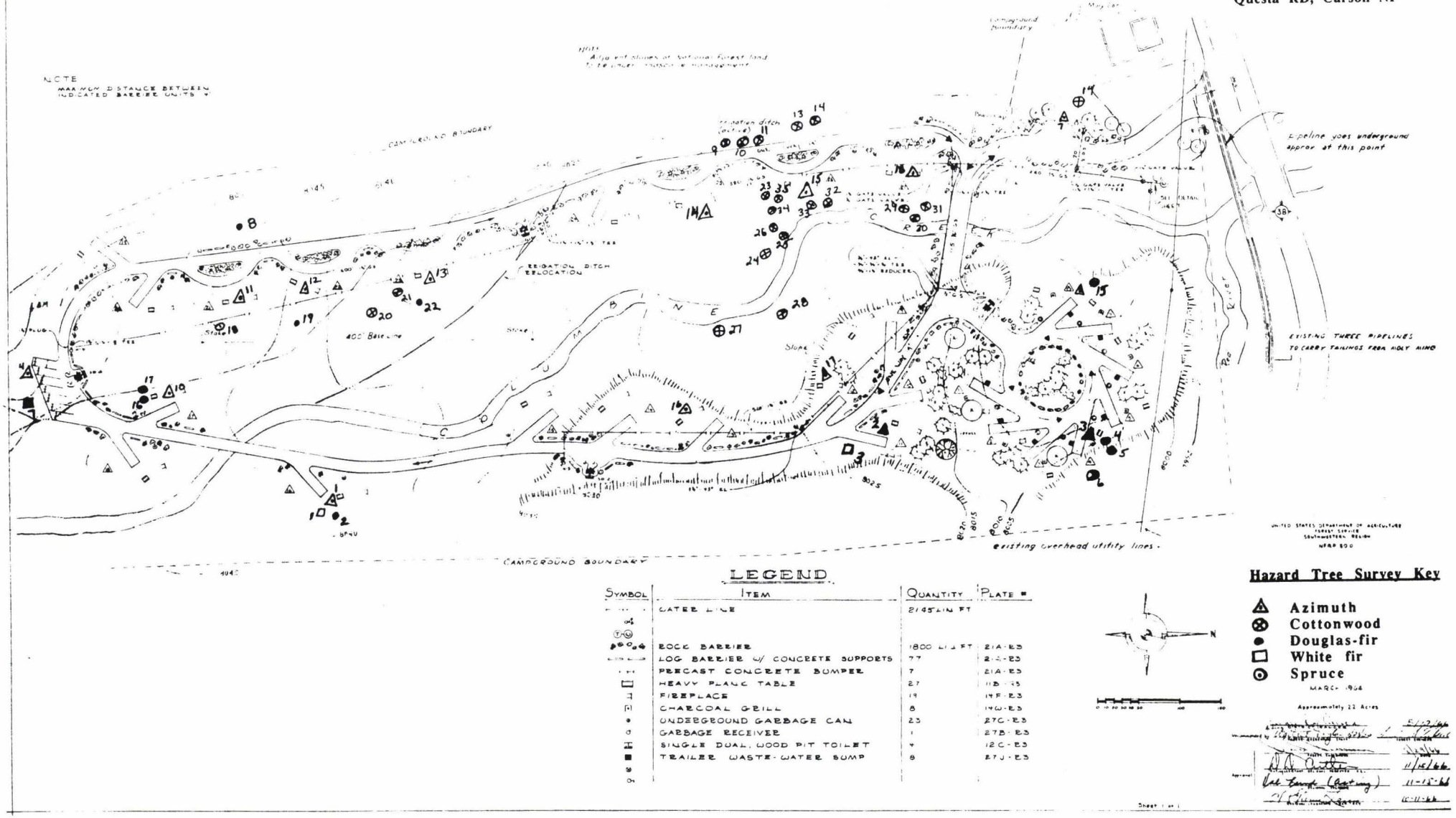


Figure 8. Columbine CG
Hazard Tree Survey Map
Questa RD, Carson NF




## LEGEND

| Symbol | Item | Quantity | Plate # |
|---|---|---|---|
| | GATE LINE | 2145 LIN FT | |
| | ROCK BARRIER | 1800 LIN FT | 21A-E3 |
| | LOG BARRIER W/ CONCRETE SUPPORTS | 77 | 21A-E3 |
| | PRECAST CONCRETE BUMPER | 7 | 21A-E3 |
| | HEAVY PLANK TABLE | 27 | 11B-E3 |
| | FIREPLACE | 19 | 14F-E3 |
| | CHARCOAL GRILL | 8 | 14G-E3 |
| | UNDERGROUND GARBAGE CAN | 23 | 27C-E3 |
| | GARBAGE RECEIVER | 1 | 27B-E3 |
| | SINGLE DUAL WOOD PIT TOILET | 4 | 12C-E3 |
| | TRAILER WASTE-WATER SUMP | 8 | 27J-E3 |

## Hazard Tree Survey Key

- Azimuth
- Cottonwood
- Douglas-fir
- White fir
- Spruce

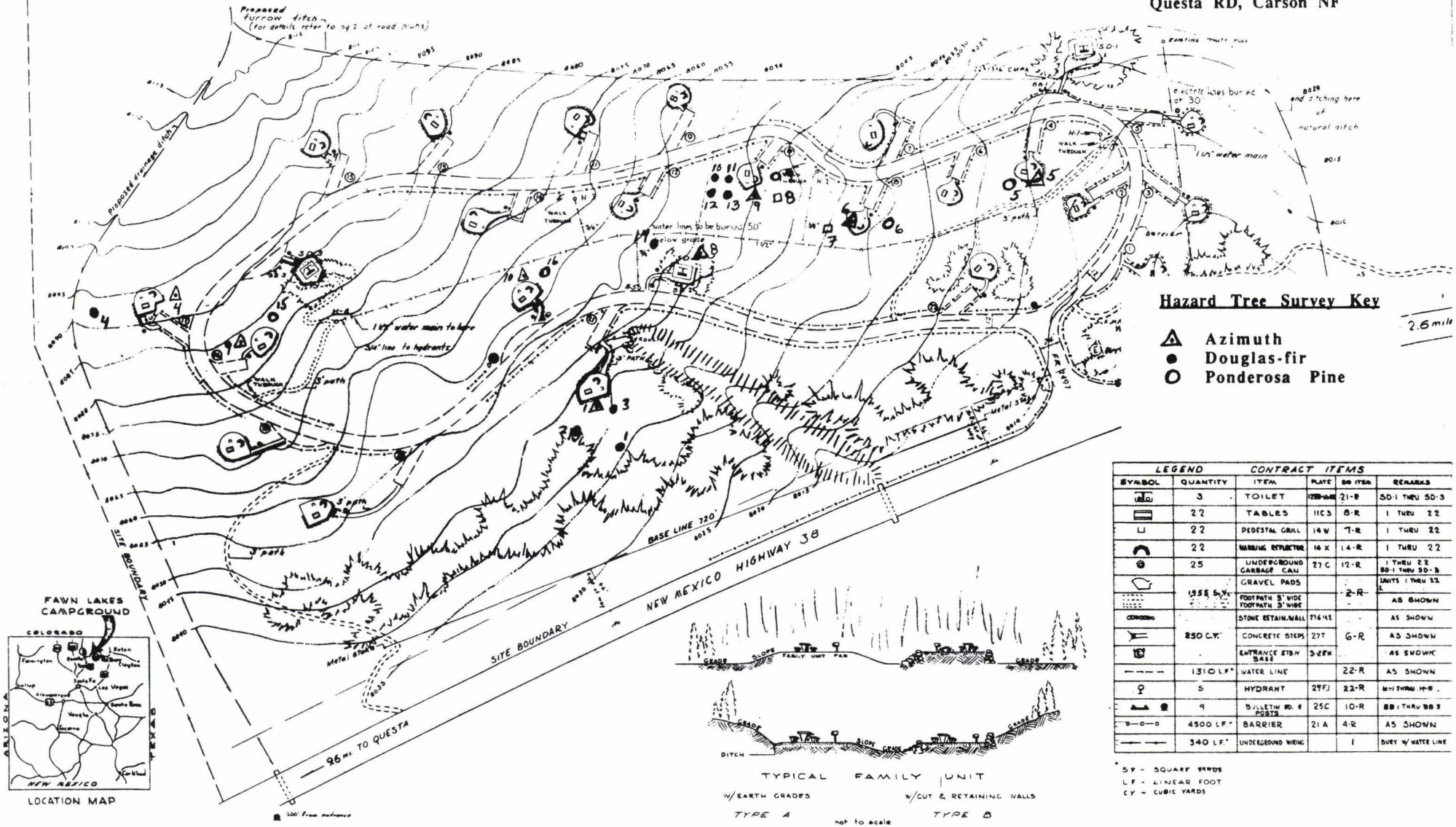
MARCH 1966

Approximately 22 Acres

| | |
|---|---|
| | 5/12/66 |
| | 11/15/66 |
| | 11-15-66 |
| | 11-11-66 |

Sheet 1 of 1

**Figure 9. Fawn Lakes CG**
**Hazard Tree Survey Map**
**Questa RD, Carson NF**

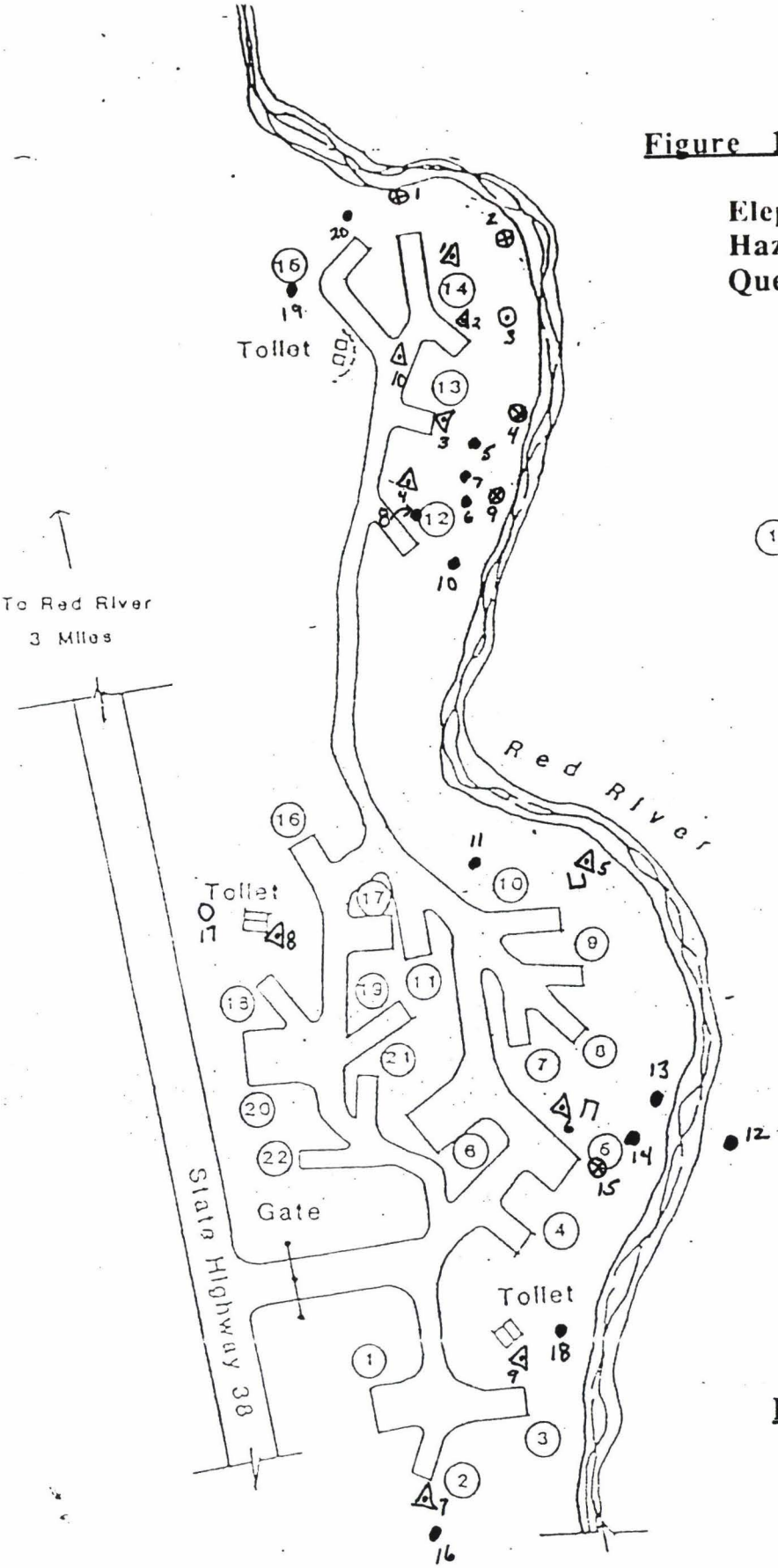



| LEGEND | | CONTRACT ITEMS | | | |
|---|---|---|---|---|---|
| SYMBOL | QUANTITY | ITEM | PLATE | SO ITEM | REMARKS |
| | 3 | TOILET | [illegible] | 21-R | SD-1 THRU SD-3 |
| | 22 | TABLES | 11C3 | 8-R | 1 THRU 22 |
| | 22 | PEDESTAL GRILL | 14W | 7-R | 1 THRU 22 |
| | 22 | MARKING REFLECTOR | 16X | 14-R | 1 THRU 22 |
| | 25 | UNDERGROUND GARBAGE CAN | 27C | 12-R | 1 THRU 22 SD-1 THRU SD-3 |
| | 1355 S.Y. | GRAVEL PADS | | 2-R | UNITS 1 THRU 22 |
| | | FOOTPATH 5' WIDE FOOTPATH 3' WIDE | | | AS SHOWN |
| | 250 C.Y. | STONE RETAINING WALL | 27H2 | G-R | AS SHOWN |
| | | CONCRETE STEPS | 27T | | AS SHOWN |
| | | ENTRANCE STRUCTURE BASE | 5-ERA | | AS SHOWN |
| | 1310 L.F.* | WATER LINE | | 22-R | AS SHOWN |
| | 5 | HYDRANT | 29FJ | 22-R | SEE THRU H-5 |
| | 9 | BULLETIN BD. & POSTS | 25C | 10-R | BB1 THRU BB3 |
| | 4500 L.F.* | BARRIER | 21A | 4-R | AS SHOWN |
| | 340 L.F.* | UNDERGROUND WIRING | | 1 | BURY W/ WATER LINE |

* SY - SQUARE YARDS
LF - LINEAR FOOT
CY - CUBIC YARDS

## Figure 10.

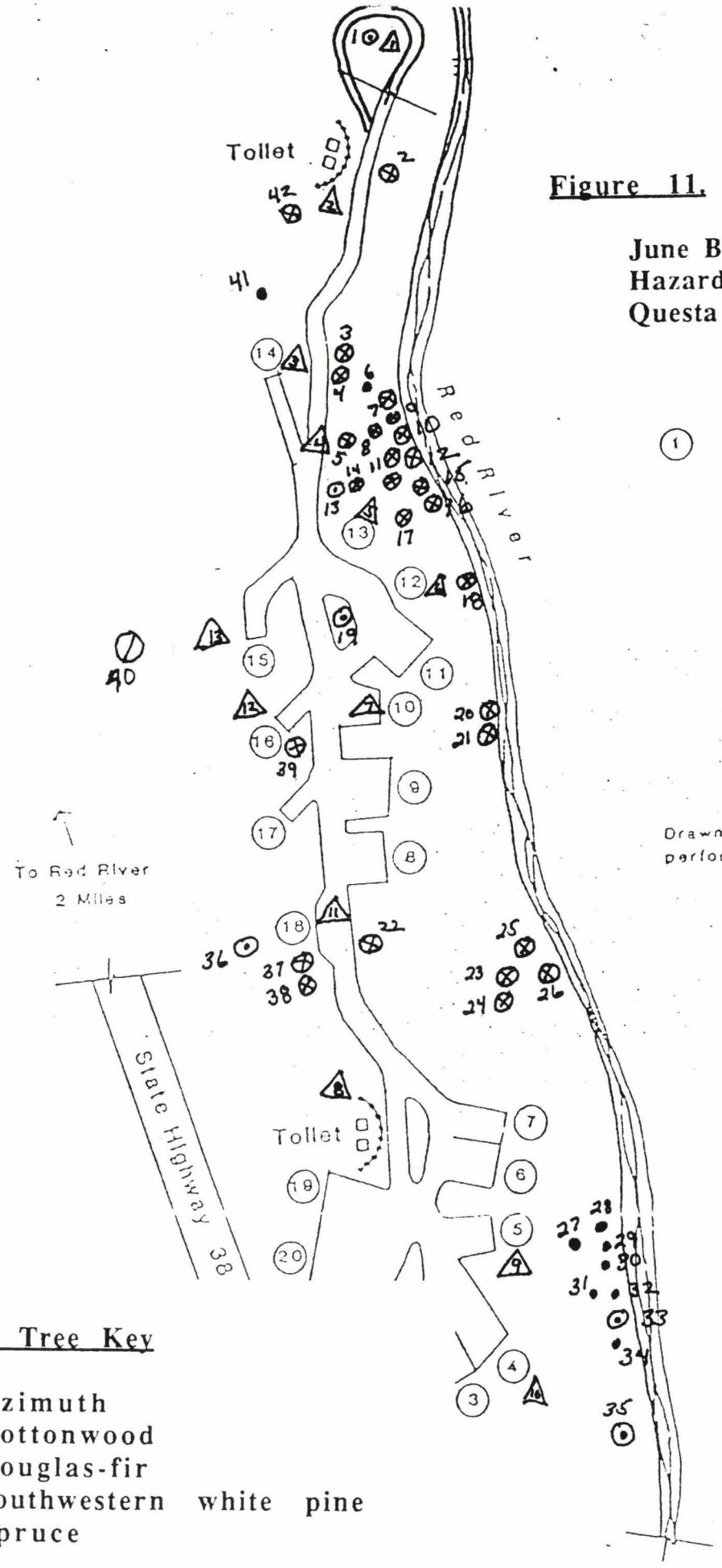
**Elephant Rock CG**
**Hazard Tree Survey Map**
**Questa RD, Carson NF**




(1) CIRCLED NUMBERS INDICATE A CAMPSITE WHICH INCLUDES A PARKING SPUR, PICNIC TABLE AND FIRE RING

**Hazard Tree Survey Key**

- Azimuth
- Cottonwood
- Douglas-fir
- Ponderosa pine
- Spruce




## Figure 11.

**June Bug CG**
**Hazard Tree Survey Map**
**Questa RD, Carson NF**

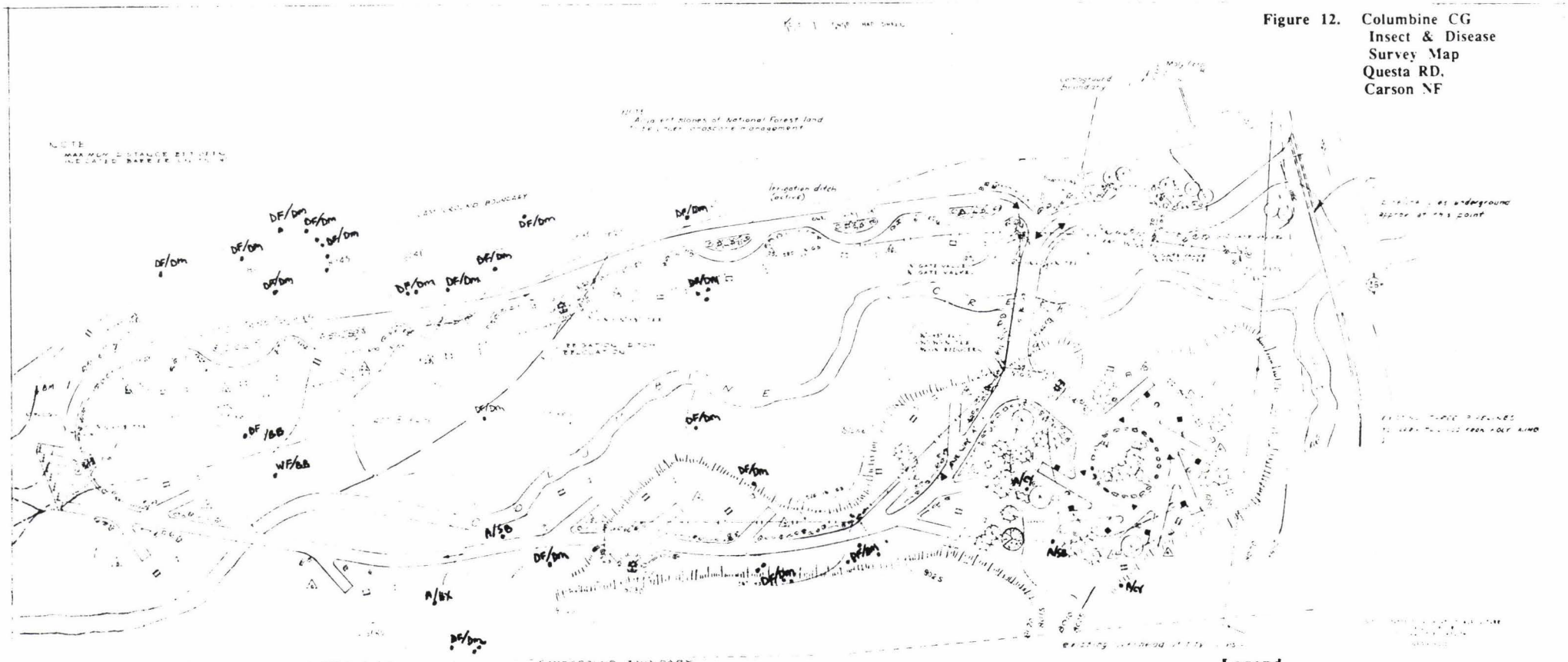
(1) CIRCLED NUMBERS INDICATE A CAMPSITE WHICH INCLUDES A PARKING SPUR, PICNIC TABLE AND FIRE RING

Drawn from rough "as built" survey performed by P. J. Walker 4/84

### Hazard Tree Key

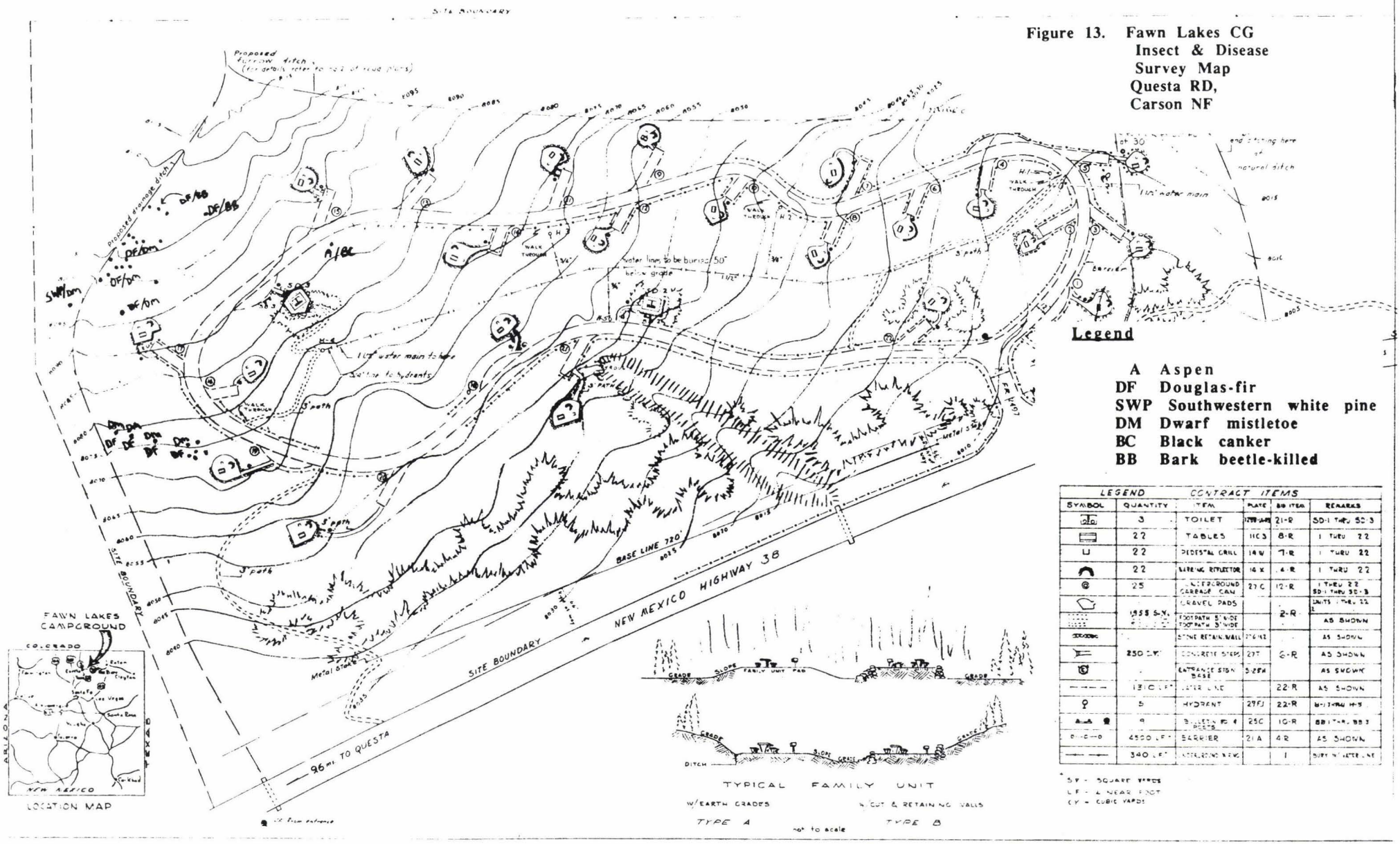
- △ Azimuth
- ⊗ Cottonwood
- ● Douglas-fir
- ⊘ Southwestern white pine
- ⊙ Spruce

**Figure 12.** Columbine CG
Insect & Disease
Survey Map
Questa RD.
Carson NF




**Legend**

A - Aspen
DF - Douglas-fir
WF - White Fir
DM- Dwarf mistletoe
BB - Bark beetled-killed
HX - Hypoxylon canker
SB - Sooty-bark, canker
CY - Cytospora canker


Site Boundary
Proposed diversion ditch
Proposed drainage ditch
DF/BB
DF/DM
DF/BC
SWP/DM
DF/DM
DF/BC
DM
DF
DF
DF

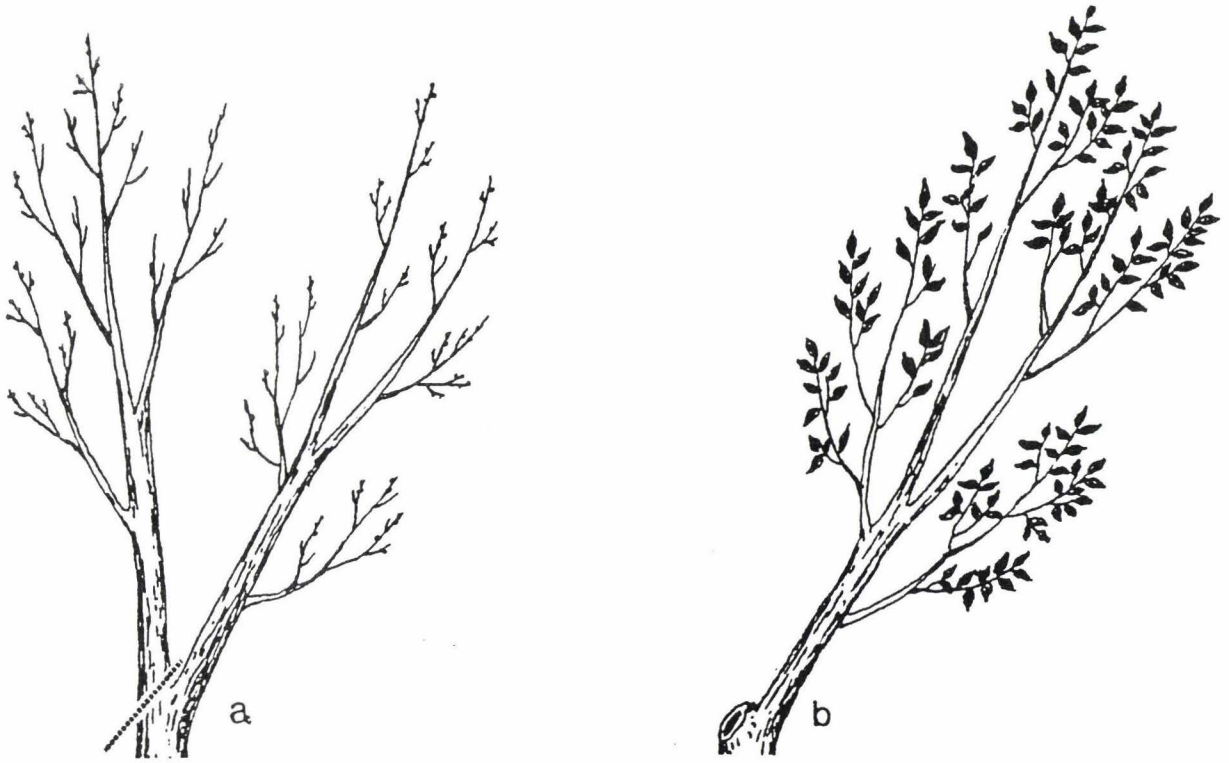



Figure 14 a. Drop-crotching to remove a limb. Remaining leader will produce foliage (b) to inhibit latent shoots and encourage callus growth over wound.

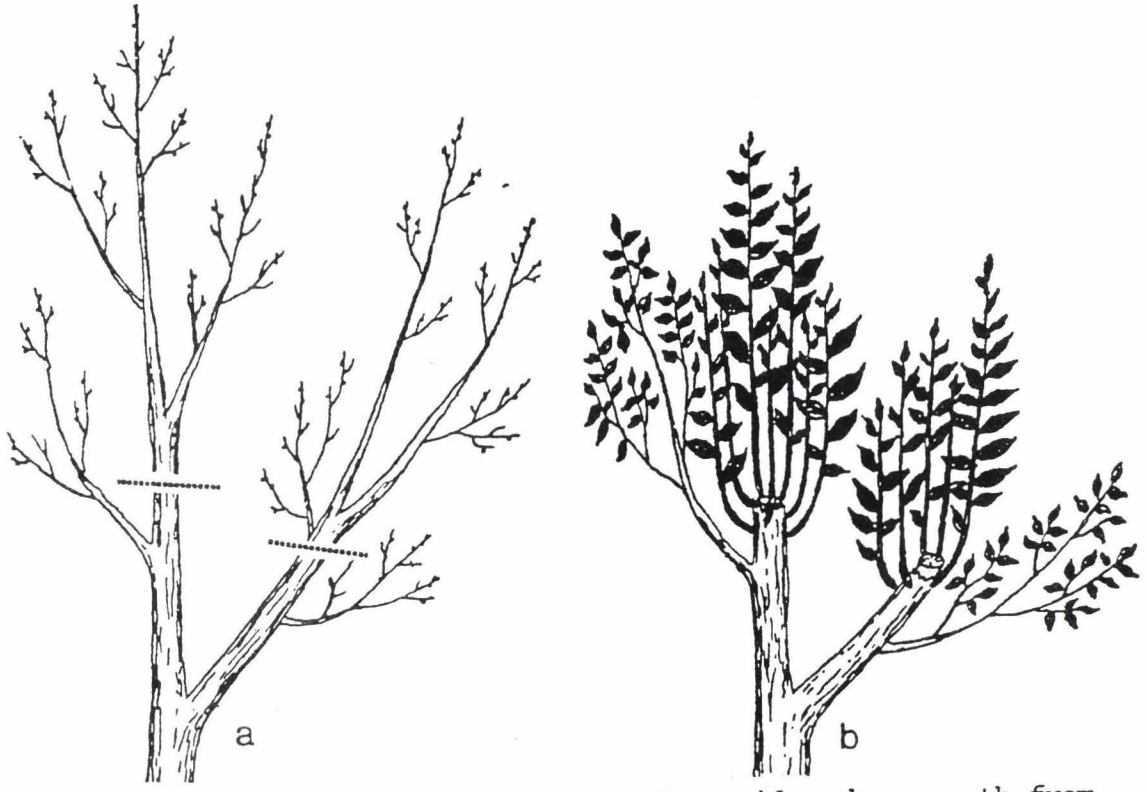



Figure 15 a. Topped trees will result in rapid sucker growth from latent buds (b). Such shoots are weak and destroy the natural tree shape.

TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF

Examined by _____

Site name La Vinatoria PG

Date 6-21-89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | Dbh | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 25 | | | | | | | | | | | | | | | | | | | |
| 1 | | W. end of BG 230° 8' | CW | 18 | | | | X | X | | | X | | | X | | | LD, WF | |
| 2 | | 216° 25' | CW | 16 | | | | X | X | | | X | | | | X | | LD, WF | |
| 3 | | NW corner conc. slip 90° 26' | CW | 18 | | | X | | | X | | | X | | X | | | BW (fire scar, dying) | |
| 3 | 4 | Center TB 221° 31' | CW | 18 | 12° | | | X | | X | | | X | | X | | | DT (dying) | |
| | 5 | 246° 29' | CW | 24 | | | | X | | | X | | X | | | | X | ER, LD, WF (dying) | |
| 4 | 6 | TB 50° 28' | CW | 21 | | | | X | | | X | | X | | | | X | LD (dying) | |
| 5 | 7 | TB 260° 47' | CW | 16 | | | | X | | X | | | X | | | X | | LD, WF | |
| | 8 | 240° 10' | CW | 14 | | | | X | X | | | X | | | X | | | LD, WF | |
| | 9 | 50° 23' | CW | 18 | | | | X | X | | | X | | | | X | | LD | |

# TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF

Examined by _____

Site name La Victoria PG

Date 6-21-89

| Campground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | Dbh. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 10 | 26 | Center TB 48° 15.5' | (W) | 10 | | | | X | | | | | X | | | | X | LD | |

ABBREVIATIONS:
TC=Toilet
TB=Table
FR=Fire ring
PP=Parking pad
TP=Tent pad
WH=Water hydrant
BG=Bridge
TC=Trash can
TD=Trailer dump

*DEFECT ABBREVIATIONS:
RR=Root rot
BR=Bole or butt rot
BW=Bole wound
BC=Basal cavity
LD=Limb defect
WF=Weak Fork
C=Conk(s)
DT=Dead top
ER=Exposed roots

# TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF  Examined by _____

Site name El Nosa / C G  Date 7/6/89

| Campground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | Dbh. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), D/T=Dead top, ER=Exposed roots | |
| 27 | 1 | From N. end of BG 260° 6' | CW | 30 | 24' | | X | X | X | | | X | | | X | | | BW, BD, WF (dead branches) | |
| | 2 | From N. end of BG 110° 39' | CW | 17.3 | | | | X | | | X | X | | | | | X | LD, WF (dead branches) | |
| | 3 | From TB 144° 25' | CW | 34.0 | | | | X | X | | | X | | | X | | | LD, WF (dead branches) | |
| | 4 | From N corner of BG 135° 10' | CW | 16.3 | | | | X | X | | X | X | | | X | | | LD, WF (dead branches) | |
| | 5 | From N. side of BG 128° 21' | CW | 15.0 | | | | X | X | X | | | | X | | | X | LD, WF (dead branches) | |
| | 6 | From TB 1 170° 38' | CW | 16.5 | | | | | X | | | X | | | X | | | Dead top | |
| | 7 | From TB 1 210° 38' | CW | 13.0 | | | | | | | | | X | | X | | | Dead top | |
| | 8 | From TB 1 234° 50' | CW | 13.5 | | | | X | | | | | X | | | X | | Dying | |
| | 9 | From TB 6 152° 38' | Box E | 8.0 | 50' | | | X | | | | | X | | | X | | WF, LD | |

TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF

Examined by _____

Site name El Nogal C G

Date 7/6/89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | D.B.H. (inches) | Leaning (angle of lean) | *See Abbreviations Type of defect: Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Med | Failure rating: Low | Risk rating: High | Risk rating: Med | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TC=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), D/T=Dead top, ER=Exposed roots | |
| 28 | | | | | | | | | | | | | | | | | | | |
| TD | 10 | From TB 8 168° 41' | Box Elder | 6.7 | 60° | | | | | | | | | X | | | X | Several box elders with lean have blown down | |

TREE HAZARD EVALUATION

Administrative unit Camino Real RD/Carson NF

Examined by _____

Site name Las Petacas CG

Date 6-21-89

| Camp or ground Unit No. | Pic n i c | Tree Location (azimuth and distance from fixed object) | Species | D.B.H. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: H i g h | Failure rating: M e d i u m | Failure rating: L o w | Risk rating: H i g h | Risk rating: M e d i u m | Risk rating: L o w | Additional comments | Acti |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet TB=Table FR=Fire ring PP=Parking pad TP=Tent pad WH=Water hydrant BG=Bridge TC=Trash can TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot BR=Bole or butt rot BW=Bole wound BC=Basal cavity LD=Limb defect WF=Weak Fork C=Conk(s) DT=Dead top ER=Exposed roots | |
| A 1 | | Center TB 180° 24' | CW | 14 | | | | X | X | | | X | | | X | | | Dead | |

# TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF

Examined by _____

Site name Capulin C G

Date 6-21-89

| Campground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | D.B.H. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: H i g h | Failure rating: M e d i u m | Failure rating: L o w | Risk rating: H i g h | Risk rating: M e d i u m | Risk rating: L o w | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1 | S. end BR 288° 37.5' | CW | 22 | | | X | | X | | | | X | | X | | | BR | |
| 2 | 2 | FR 292° 48' | CW | 30 | | | | X | | X | | X | | | X | | | LD | |
| 3 | 3 | Center TB 140° 35' | WF | 10 | | X | | | | | X | X | | | | | X | | |
| 4 | 4 | Center TB 135° 22.5' | CW | 26 | 10° | | | X | | X | | | X | | | X | | LD, ER (declining) | |
| 5 | 5 | Center Rockwall 196° 18' | CW | 32 | | | | X | | X | | X | | | | X | | LD, WF | |
| 6 | 6 | TC/Post 198° 22.5' | DF | 8 | | | X | | | X | | X | | | | | X | Dead | |
| 7 | 7 | Center TB 110° 40' | DF | 30 | | | | X | | X | | X | | | X | | | LD, DT- Beetle killed | |
| 8 | 8 | Center FR 358° 37' | CW | 40 | | | | X | | | | X | | | X | | | LD, WF (Dalining) | |

*DEFECT ABBREVIATIONS:
RR=Root rot
BR=Bole or butt rot
BW=Bole wound
BC=Basal cavity
LD=Limb defect
WF=Weak Fork
C=Conk(s)
DT=Dead top
ER=Exposed roots

ABBREVIATIONS:
TO=Toilet
TB=Table
FR=Fire ring
PF=Parking pad
TP=Tent pad
WH=Water hydrant
BG=Bridge
TC=Trash can
TD=Trailer dump

# TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF

Examined by _____

Site name La Sombra CG

Date 6-22 and 7-6-89

| Camp or Circ Ground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | Dbh | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Med | Failure rating: Low | Risk rating: High | Risk rating: Med | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 1 | 1 | Center TB 256° 21' | CW | 20 | | | | X | | | X | X | | | | | X | LD | |
| 2 | 2 | Center FR 338° 12' | CW | 28 | | | | X | X | | | X | | | X | | | LD, WF, dead | |
| 3 | 3 | E. edge of retaining 324° 35' | CW | 34 | | | | X | | | X | X | | | | | X | LD, WF (dead branches) | |
| 4 | 4 | N end of bridge 92° 32' | CW | 41 | | | | X | X | | | X | | | X | | | LD, WF (dead branches) | |
| | 5 | N. end of bridge 92° 32' | CW | 19 | | | | X | X | | | X | | | X | | | LD, WF (dead branches) | |
| | 6 | N. end of bridge 110° 100' | CW | 20 | 18° | | | | | | X | X | | | | X | | Dead | |
| 7 | 7 | From 10" Post 296° 98' | CW | 57 | | | | X | | X | | X | | | | X | | LD, WF (dead branches) | |
| 8 | 8 | From FR 80° 24' | CW | 26 | | | | | X | | | X | | | X | | | Dead w/ fascent | |
| 9 | 9 | From pay booth 195° 26' | CW | 33 | 22° | | X | X | X | | | X | | | X | | | RR, BR, WF, ER | |

# TREE HAZARD EVALUATION

Administrative unit Camino Real RD / Carson NF

Examined by _____

Site name La Sombra CG

Date 6-22 and 7-6-89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: H | M | L | Risk rating: H | M | L | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TC=Toilet TB=Table FR=Fire ring PP=Parking pad TP=Tent pad WH=Water hydrant BG=Bridge TC=Trash can TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot BR=Bole or butt rot BW=Bole wound BC=Basal cavity LD=Limb defect WF=Weak Fork C=Conk(s) DT=Dead top ER=Exposed roots | |
| 10 | 10 | center of TB 250° 21' N. side of CG | CW | 24.5 | | | | X | X | | | | X | | X | | | WF, dead | |
| 11 | 11 | 260° 15' | CW | 17.5 | 20° | | | X | | X | | X | | | | X | | LD, WF | |
| | 12 | 250° | CW | 32.0 | | | | X | | X | | X | | | | X | | LD, WF | |

TREE HAZARD EVALUATION

Administrative unit Curson NF

Examined by

Site name Columbine CG

Date

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | D.b.h. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, broms, dead top | Potential targets: Permanent structure, parked vehicle, people | Temporary structure, high-use trails | Low-use trails, signs | Failure rating: H | M | L | Risk rating: H | M | L | Additional comments | Actio |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TC=Toilet TB=Table FR=Fire ring PP=Parking pad TP=Tent pad WH=Water hydrant BG=Bridge TC=Trash can TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot BR=Bole or butt rot BW=Bole wound BC=Basal cavity LD=Limb defect WF=Weak Fork C=Conk(s) DT=Dead top ER=Exposed roots | |
| 1 | From fire ring site 6 135° 20' | WF | 5.1 | | | | | X | | | X | | | X | | | Dead | |
| 2 | 109° 24' | DF | 5.9 | | | | | X | | | X | | | X | | | Dead | |
| 3 | From fill post sign 162° 59' | WF | 8.2 | | | | | X | | | X | | | X | | | Dead near loop road | |
| 4 | From fire pit site 4 346° | CW | 15.1 | | | | | X | | | X | | | | X | | Dead limbs | |
| 5 | 347° | CW | 9.5 | | | | | X | | | X | | | | X | | Dead limbs | |
| 6 | 68° | CW | 13.2 | | | | | X | | | X | | | | X | | Dead limbs | |
| 7 | From stone stairway head of Columbine Trail Str. 127 40' | A | 14.6 | | | | | | X | | | | X | | | X | | BR, Black canker | |
| 8 | From site 21 post 271° 40' | DF | 19.7 | | | | | X | | | X | | | X | | | Dead | |
| 9 | From CW host - sn 195° 60' | CW | 17.0 | | | | X | | X | | X | | | X | | | Dead forks | |

TREE HAZARD EVALUATION

Administrative unit Carson NF

Examined by

Site name Columbine CG

Date

| Campground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | Dbh | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, broms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TT=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 10 | 10 | 197° 55' | CW | 16.0 | | | | X | | X | | X | | | X | | | Dead forks | |
| 11 | 11 | 201° 52' | CW | 17.5 | | | | X | | X | | X | | | X | | | Dead forks | |
| 12 | 12 | 225° 45' | CW | 21.4 | | | | X | | X | | X | | | X | | | Dead forks | |
| 13 | 13 | 244° 40' | CW | 18.2 | | | | X | | X | | X | | | X | | | Dead forks | |
| 14 | 14 | from hydrant near entrance 301° 8' | CW | 19.3 | | | | X | X | | | X | | | X | | | Dead forks | |
| 15 | 15 | from fire pit, site 8 340° 24' | CW | 22.2 | | | | X | X | | | X | | | X | | | Dead limbs | |
| 16 | 16 | From fire pit, site 17 160° 30' | BS | 4.2 | | | | | X | | | X | | | X | | | Dead | |
| 17 | 17 | 200° 25' | BS | 8.6 | | | | | X | | | X | | | X | | | | |
| 18 | 18 | from fire pit, site 21 79° 32' | BS | 16.7 | | | | | X | | | X | | | X | | | Dead | |

TREE HAZARD EVALUATION

Administrative unit Curson NF

Examined by

Site name Columbine CG

Date

| Campground Unit No. | Pic no. | Tree Location (azimuth and distance from fixed object) | Species | Dbh | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Temporary structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 35 | | | | | | | | | | | | | | | | | | | |
| 19 | | From fire pit, site 22 117° 35' | DF | 11.7 | 10° | | | | X | | | X | | | | X | | Dead | |
| 20 | | 50° 40' | CW | 16.3 | | | | | X | | | X | | | | X | | Dead | |
| 21 | | From fire pit, site 23 176° 42' | CW | 12.3 | | | | | X | | | X | | | | X | | Dead | |
| 22 | | 164° 30' | DF | 6.9 | | | | | X | | | X | | | X | | | Dead | |
| 23 | | Fire pit, site 25 20° 66' | CW | 13.7 | 40° | | | | | | X | X | | | | X | | strong kay, dead fork | |
| 24 | | From fire pit, site 26 142° 112' | CW | 16.1 | | | | | | X | | X | | | | X | | Dead | |
| 25 | | 142° 105' | CW | 16.3 | | | | X | | X | | X | | | | X | | Dead forks | |
| 26 | | 143° 105' | CW | 21.0 | | | | X | | X | | X | | | | X | | Dead forks | |
| 27 | | From fire ring, site 14 304° 90' | CW | 15.2 | | | | | | | X | X | | | | | X | Dead leaning | |

TREE HAZARD EVALUATION

Administrative unit Curson NF

Examined by

Site name Columbine CG

Date

| Campground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, broms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Moderate | Failure rating: Low | Risk rating: High | Risk rating: Moderate | Risk rating: Low | Additional comments | Act. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 17 | 28 | From fire ring, site 12: 228° 102' | CW | 12.9 | | | | | X | | | X | | | X | | | Dead leaning | |
| 16 | 29 | From fire ring, site 27: 42° 35' | CW | 7.6 | | | | | X | | | X | | | X | | | Dead leaning | |
| 18 | 30 | 42° 35' | CW | 7.7 | | | | | X | | | X | | | X | | | Dead leaning | |
| 18 | 31 | 42° 35' | CW | 9.3 | | | | | X | | | X | | | X | | | Dead leaning | |
| 13 | 32 | From fire ring, site 26: 100° 35' | CW | 10.5 | | | | | X | | | X | | | X | | | Dead leaning | |
| 15 | 33 | 98° 35' | CW | 11.3 | | | | | X | | | X | | | X | | | Dead leaning | |
| 15 | 34 | From fire ring, site 26: 181° 90' | CW | 12.3 | | | | | | | X | X | | | | X | | Nearly dead, leaning | |
| 15 | 35 | 181° 90' | CW | 19.3 | | | | | | | X | X | | | | X | | Dead forks | |

# TREE HAZARD EVALUATION

Administrative unit Questa RD Carson NF

Examined by _____

Site name Fawn Lakes C.G.

Date 7/7/89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | D.B.H. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Medium | Low | Risk rating: High | Medium | Low | Additional comments | Act |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TT=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 1 | | From wall site 20 170° 57' | DF | 10.1 | | | | | | | X | X | | | | | X | Dead | |
| 2 | | From site 20 wall sign 230° 46' | DF | 12.2 | | | | | | | | X | | | | X | | Dead | |
| 3 | | From wall center 170° 36' | DF | 22.0 | | | | | | X | | X | | | | X | | Dead | |
| 4 | | From table center 266° 39' | PP | 20.0 | | | | | | | X | X | | | | X | | LD | |
| 5 | | From table center site 5 276° 9' | PP | 26.0 | | | | | X | | | X | | | X | | | LD | |
| 6 | | From table center site 8 72° 9' | PP | 26.0 | | | | | X | | | X | | | | | | LD | |
| 6 | 7 | From table center site 8 268° 31' | DF | 6.0 | | | | | X | | | | X | | | X | | Dead | |
| 7 | 8 | From center wall site 9 106° 57' | DF | 16.5 | 3° | | | | X | | | | X | | X | | | Dead | |
| 7 | 9 | E. corner wall site 9 62° 42' | PP | 18.0 | | | | | | X | | | X | | | X | | LD | |

TREE HAZARD EVALUATION

Administrative unit Questa RD Carson NF

Examined by _____

Site name Fawn Lakes CG

Date 7/7/89

| Campground Unit No. | Pic no. | Tree Location (azimuth and distance from fixed object) | Species | Dbh. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Acti |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TT=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| A | 10 | From E. corner well site 9 36' 292° | DF | 16.0 | | | | | X | | | X | | | X | | | Dead | |
| A | 11 | 55' 290° | DF | 1.0 | | | | | X | | | X | | | X | | | Dead | |
| A | 12 | 53' 284° | DF | 12.0 | 10° | | | | X | | | X | | | X | | | Dead | |
| A | 13 | 42' 263° | DF | 17.5 | | | | | X | | | X | | | X | | | Dead | |
| A | 14 | From brick toilet 48' 297° | DF | 19.5 | | | | | X | | | X | | | | X | | Dead | |
| A | 15 | From table ctr. site 15 10' 330° | PP | 22.4 | | | | | X | | | X | | | X | | | Dead limbs | |
| A | 16 | From table ctr. site 15 29' 36° | PP | 16.0 | | | | | | X | | | X | | | | X | Dead limbs | |

# TREE HAZARD EVALUATION

Administrative unit Questa RD / Carson NF  Examined by _____

Site name Elephant Rock  Date 7-13-89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TT=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | Species | DBH | (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | High | Medium | Low | High | Medium | Low | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| ① | 1 | FR 60° 29' | CW | 12.1 | 30° | | | X | | X | | | Y | | | Y | | DT | |
| | 2 | 203° 28' | CW | 21.6 | | | | X | X | | | X | | | X | | | LD, WF | |
| ② | 3 | Post #5 182° 31' | BS | 14.8 | | | | | X | | | X | | | X | | | Dead | |
| ③ | 4 | Post #3 174° 55' | CW | 19.1 | | | | X | X | | | | X | | X | | | LD, WF | |
| | 5 | 92° 53' | DF | 11.2 | | | | | | | | X | | | | X | | Declining | |
| ④ | 6 | FR 206° 37' | DF | 12.5 | | | | | X | | | X | | | X | | | Dead | |
| | 7 | 204° 37' | DF | 6.3 | | | | | | | X | X | | | | | X | Dead | |
| | 8 | 260° 17.5' | DF | 9.6 | | | | | X | | | X | | | X | | | Dead | |
| | 9 | 230° 45' | CW | 19.2 | | | | X | X | | | | Y | | X | | | LD | |

# TREE HAZARD EVALUATION

Administrative unit Questa RD / Carson NF  Examined by _____

Site name Elephant Rock  Date 7-13-89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | Dbh | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Moderate | Low | Risk rating: High | Moderate | Low | Additional comments | Act |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 4 | 10 | FR 234° 33' | DF | 7.3 | | | | | | | X | X | | | | X | | Dead | |
| 5 | 11 | FR 12° 27' | DF | 16.8 | | | | | X | | | X | | | X | | | Dead | |
| 6 | 12 | 198° 130' | DF | 14.0 | | | | | | | X | X | | | | | X | Dead - across stream | |
| | 13 | 202° 37.5' | DF | 19.0 | | | | | X | | | X | | | X | | | Dead | |
| | 14 | 208° 28' | DF | 11.9 | | | | | X | | | X | | | X | | | Dead | |
| | 15 | 262° 41' | CW | 13.6 | | | | X | X | | | X | | | | X | | LD, WF | |
| A | 16 | FR site C 15' 222° | DF | 6.3 | | | | | X | | | X | | | X | | | Dead | |
| A | 17 | TO 44' 58° | PP | 13.3 | | | | | | | | | | X | X | | | ER, eroding gully | |
| 9 | 18 | TO 60' 155° | DF | 7.9 | | | | | X | | | | X | | X | | | Dead | |

# TREE HAZARD EVALUATION

Administrative unit Questa RD / Carson NF  Examined by _____

Site name Elephant Rock  Date 7-13-89

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, hole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: H | i | g | h | Risk rating: H | i | g | h | Additional comments | Act |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TU=Toilet TB=Table FR=Fire ring PP=Parking pad TP=Tent pad WH=Water hydrant BG=Bridge TC=Trash can TD=Trailer dump | | | | | | | | | | | M | d | L | | M | d | L | *DEFECT ABBREVIATIONS: RR=Root rot BR=Bole or butt rot BW=Bole wound BC=Basal cavity LD=Limb defect WF=Weak Fork C=Conk(s) DT=Dead top ER=Exposed roots | |
| 19 | | from TC Bearing 80' 31° | DF | 14.6 | 25° | | | | X | | | X | | | | X | | | | Dead | |
| 20 | | 80' 58° | DF | 7.3 | | | | | X | | | X | | | | X | | | | Dead | |

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TREE HAZARD EVALUATION

Administrative unit Questa RD, Carson NF

Examined by _____

Site name Tunebug CG

Date July 12, 1989

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: H | M | L | Risk rating: H | M | L | Additional comments | Acti |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | high | med | low | high | med | low | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| ⚠ 1 | | >E area of inner turnaround. East end of CW | BS | 16" | | | | | X | | | | X | | X | | | Dead, Fill of beetles | |
| ⚠ 2 | | From toilets, East end of CW 224° 57' | CW | 19.5 | | | | | | | X | X | | | | | X | LD | |
| ⚠ 3 | | Picnic table, site 14 122° 62' | CW | 18.0 | | | | X | | X | | X | | | | X | | LD | |
| 4 | | 177° 62' | CW | 14.5 | | | | | | | | X | | | | X | | LD, WF, ER | |
| 5 | | 214° 56' | CW | 14.3 | | | | X | | | X | X | | | | X | | LD, WF | |
| 6 | | 203° 72' | DF | 18.0 | | | | | | X | | X | | | | X | | Many dead branches | |
| 7 | | 218° 113' | CW | 7.0 | | X | | | | | X | | X | | | | X | BR | |
| ⚠ 8 | | From post marking entrance to site 14 183° 110' | CW | 11.0 | | X | | | | | X | | X | | | | X | BR | |
| 9 | | 178° 110' | CW | 10.3 | | | | | | | X | | X | | | | X | LD | |

TREE HAZARD EVALUATION

Administrative unit Questa RD, Carson NF

Examined by _____

Site name Junebug CG

Date July 12, 1989

| Campground Unit No. | Pic no. | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Act |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | Spec. | D.b.h. | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 4 | 10 | 178° 110' | CW | 10.7 | | | | | | | X | | X | | | | X | LD | |
| | 11 | 190° 110' | CW | 9.6 | | | | | | | X | X | | | | | X | LD/WF/dead fork | |
| | 12 | 224° 88' | CW | 31.3 | | | X | | | | | X | | | X | | | hollow bole, wildlife tree rotten | |
| 5 | 13 | from site 13, fireing 101° 38' | BS | 13.4 | 10° | | | | X | | | | X | | X | | | Dead tree | |
| | 14 | 103° 33' | CW | 25.0 | | X | | | X | | | X | | | X | | | BR, LD | |
| | 15 | 151° 72' | CW | 17.5 | | | | X | | | X | X | | | | | X | LD | |
| | 16 | 151° 80' | CW | 17.4 | | | | X | | | X | X | | | | | X | LD | |
| | 17 | 166° 35' | CW | 32.0 | | | | X | | X | | X | | | | X | | LD | |
| 6 | 18 | from fireing site 12 176° 28' | BS | | 22° | | | | | | X | | | X | | | X | Leaning tree, exposed roots | |

TREE HAZARD EVALUATION

Administrative unit Questa RD, Carson NF

Examined by _____

Site name Junebug CG

Date July 12, 1989

| Campground Unit No. | Pic | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Act |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 6 | 19 | 0° 39′ | CW | 22′ | | | | X | X | | | X | | | X | | | DT | |
| 4 | 20 | From fire ring site 10 169° 69′ | CW | 14″ | 12° | X | | | | X | | | X | | X | | | Leaning, partially rotten | |
| | 21 | 195° 80′ | CW | 26.2 | | | | X | | | X | X | | | | X | | LD | |
| 5 | 22 | From toilets, AB & C 131° 100′ | CW | 6.2 | 24° | | | | X | | | X | | | X | | | Dead, Leaning over road | |
| | 23 | 167° 101′ | CW | 14.0 | | | | X | | X | | X | | | | X | | Dead limbs | |
| | 24 | 167° 101′ | CW | 21.0 | | | | X | | X | | X | | | | X | | | |
| | 25 | 167° 106′ | CW | 11.7 | | | | X | | | X | X | | | | X | | Dead limbs | |
| | 26 | 167° 106′ | CW | 8.3 | 40° | | | | | | | | | X | | | X | Leaner | |
| 4 | 27 | From fire rings sites 136° 49′ | DF | 11.0 | | | X | | | | X | | | | | X | | RR, Dead, Broken top, Red Ring rot | |

TREE HAZARD EVALUATION

Administrative unit Questa RD, Carson NF

Examined by _____

Site name Junebug CG

Date July 12, 1989

| Campground Unit No. | Plot | Tree Location (azimuth and distance from fixed object) | Species | D.b.h. | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, bole cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Failure rating: Medium | Failure rating: Low | Risk rating: High | Risk rating: Medium | Risk rating: Low | Additional comments | Action |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| 28 | 38' 151° | DF | 6.0 | | | | | | X | | | X | | | X | | Dead; Red ringrot; BR | |
| 29 | 47' 174° | DF | 12.0 | | | | | | X | | | X | | | X | | Dead; red ringrot; BR | |
| 30 | 40' 204° | DF | 7.0 | | | | | | X | | | X | | | X | | Dead; red ringrot, BR | |
| 31 | 66' 167° | DF | 11.0 | | | | | | X | | | X | | | X | | Dead; red ringrot; BR | |
| 32 | 68' 168° | DF | 13.0 | | | | | | X | | | X | | | X | | Dead; redringrot; BR | |
| 33 | 65' 239° | BS | 19.0 | | X | | | | | X | | X | | | | X | Dead; BR; broken top | |
| 34 | 90' 199° | DF | 20.0 | | | X | | | | X | | X | | | | X | Dead; decaying redringrot | |
| 35 | From Fireringsite4 78' 201° | CW | 24.0 | | X | | | | | X | X | | | | X | | Dead; decaying | |
| 36 | From E. Fireringsite8 79' 291° | BS | 11.3 | | X | | | | X | | | X | | X | | | Dying; ER; potential RR | |

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# TREE HAZARD EVALUATION

Administrative unit Questa RD, Carson NF

Examined by _____

Site name Junebug CG

Date July 12, 1989

| Campground Unit No. | Pic No. | Tree Location (azimuth and distance from fixed object) | Species | DBH | *See Abbreviations Type of defect: Leaning (angle of lean) | Up-rooting, root rot, butt rot, basal cavity | Bole wounds, holes, cankers, decay (conks) | Weak fork, limb defect, brooms, dead top | Potential targets: Permanent structure, parked vehicle, people | Permanent structure, high-use trails | Low-use trails, signs | Failure rating: High | Moderate | Low | Risk rating: High | Moderate | Low | Additional comments | Act |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ABBREVIATIONS: TO=Toilet, TB=Table, FR=Fire ring, PP=Parking pad, TP=Tent pad, WH=Water hydrant, BG=Bridge, TC=Trash can, TD=Trailer dump | | | | | | | | | | | | | | | | *DEFECT ABBREVIATIONS: RR=Root rot, BR=Bole or butt rot, BW=Bole wound, BC=Basal cavity, LD=Limb defect, WF=Weak Fork, C=Conk(s), DT=Dead top, ER=Exposed roots | |
| | 37 | 70' 248° | CW | 10.2 | 24° | X | | | X | | | X | | | X | | | BC BR | |
| | 38 | 71' 246° | CW | 11.4 | 20° | | | X | X | | | X | | | | X | | LD | |
| | 39 | from fire pit site 6 18.5' 320° | CW | 23.1 | | | | X | X | | | X | | | X | | | LD Dead fork | |
| | 40 | from fire pit site 5 52' 31° | WP | 14.0 | 15° | X | | | X | | | | X | | | X | | ER; Lean; on eroding slope | |
| | 41 | 60' 138° | DF | 8.0 | | X | | | X | | | X | | | | X | | Dead; RR; Lean across rd | |
| | 42 | 35' 256° | CW | 9.7 | | | X | | X | | | | X | | X | | | BR; rotten bole | |